IMPROVEMENT can never come out of imitation. The imitator follows, never leads.

The metal caps illustrated on this page were originated and pioneered by Phoenix . . . Phoenix *alone*.

Further . . . the lacquers, metal coatings, liners, rubber compositions, and numerous other materials which enter into the fabrication of these closures, are the result of Phoenix research and experiment.

Imitation products are inseparable from imitation quality and imitation service. That which is imitated must *first* be originated.

PHOENIX METAL CAP CO.

METAL CAPS FOR GLASS PACKAGES

OFFICES: *Chicago*, 2444 West 16th Street; *Brooklyn*, 3720 14th Avenue; *Philadelphia*, 1601 Fox Theatre Bldg.; *Boston*, 131 State Street; *Cleveland*, 1109 Guardian Bldg.; *Cincinnati*, 901 American Bldg.; *St. Louis*, 5820 Ibasca Street; *San Francisco*, 200 Davis Street; *Los Angeles*, 765 Stanford Avenue.

THE DRUG AND COSMETIC INDUSTRY

ESTABLISHED 1914

October, 1933

Editorials	327
A Divided Industry—Ten Cent Size—"Outlaw" Retailers—Cosmetics in Drug Act.	
Feature Articles	
Choosing a Trade-Mark	329
Wholesalers Assembled	330
Chest Rubs	332
Cosmetic Colors	333
New Medicines	335
Cleansing Creams	336
Readers' Questions	338
Compounders' Corner	340
Radical Packaging	349
Packaging Notes	356
Manufacturers' Forum	366
New and Non-Official	328
News	377
Abstracts	396
Raw Material Prices	409
Drug Market Place	414
Buyers' Guide	316
Index of Advertisers	415

FRONT COVER

The pictures on the front cover were taken by us at the recent meeting of the National Wholesale Druggists' Association at French Lick Springs. Identification of those in the pictures are given on another page of this issue.

Copyright 1933 by Drug Markets, Inc.

VOL. XXXIII — DRUG MARKETS, INC. PUBLISHERS — NUMBER 4

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 W. 31st St., N.Y. City

Editor
THOMAS R. FARRELL

Business Manager
FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, FOREIGN COUNTRIES THREE DOLLARS, THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES; PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

D&O
ESTABLISHED IN 1798

ESSENTIAL OILS
and Kindred Products

We offer the widest range of

PERFUME MATERIALS

Also a complete line of

ESSENTIAL OILS

The "D & O" label assures purity and fine quality.

AROMATIC CHEMICALS

We guarantee highest chemical purity and finest quality.

"D & O" COMPOUNDED PERFUME BASES

finished odors of any type desired, ready for use in toilet soaps, liquid soaps, shampoos, bath salts, etc.

■ ■ ■

A few outstanding French Specialties

FABRIQUES deLAIRE

Miel pour Savons
Civette Artificial
Amyl Phenylacetate
Phenyl Methyl Carbinol Acetate
(Styrolyl Acetate)
Iso Bornyl Acetate

J. MERO & BOYVEAU

Lavender Concrete
Aspic Absolute
FIXODORS: Benzoin, Styrax, Tolu, Labdanum, Olibanum
OILS: Spike, Thyme, Rosemary, Lavender

■ ■ ■

SUBMIT YOUR PROBLEMS TO OUR SERVICE DEPARTMENT

DODGE AND OLCOTT COMPANY
180 Varick Street New York City

"The integrity of the house is reflected in the quality of its products."

Copyright 1930

Buyers' Guide

The firms listed below are reliable sources of supply which we are glad to recommend to our readers.

Medicinal Chemicals
Abbott Laboratories
J. T. Baker Chemical Co.
Benzol Products Co.
California Fruit Growers Exchange
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.
Sherka Chemical Co.

Alcohol
A. K. Hamilton
Rossville Commercial Alcohol Corp.
U. S. Industrial Alcohol Co.

Alkaloids
Abbott Laboratories
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Bromides
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Citric Acid
H. J. Baker & Bro.
J. T. Baker Chemical Co.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.

Glandular Products
Wilson Laboratories

Magnesia
Schofield-Donald Co., Inc.

Salicylates
J. T. Baker Chemical Co.
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works

Aromatic Chemicals
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co., Inc.
Benj. French, Inc.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
Sherka Chemical Co.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Essential Oils
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Flavors
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
A. K. Hamilton
Magnus, Mabee & Reynard, Inc.
Monsanto Chemical Works
Compagnie Parento, Inc.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Cocoa Butter
R. F. Revson Co.

Cod Liver Oil
W. Benkert & Co., Inc.
P. R. Dreyer, Inc.
McKesson & Robbins, Inc.

Mineral Oil
M. W. Parsons, Imports
S. Schwabacher & Co., Inc.
L. Sonneborn Sons, Inc.
Stanco Distributors, Inc.

Quinine
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Cosmetic Materials
J. L. Hopkins & Co.
Innis, Speiden & Co.
M. W. Parsons, Imports
John Powell & Co., Inc.
R. F. Revson Co.

Cosmetics (Private Brand)
Sterling Manufacturing Co.

Bath Crystals
Solvay Sales Corp.

Botanical Drugs
W. Benkert & Co., Inc.
J. L. Hopkins & Co.
Peek & Velsor, Inc.
S. B. Penick & Co.

Absorption Bases
Th. Goldschmidt Corp.
Innis, Speiden & Co.
M. W. Parsons, Imports

Beeswax
Koster-Keunen
Theodor Leonhard Wax Co., Inc.
Will & Baumer Candle Co.

Chalk
Industrial Chemical Sales Co. Inc.
John & E. Sturge, Ltd.
Universal Gypsum & Lime Co.

Colors
Interstate Color Co., Inc.
R. F. Revson Co.

Gums
J. L. Hopkins & Co.
Thurston & Braidich

Lanolin
American Lanolin Corp.
Bopf-Whittam Corp.
Innis, Speiden & Co.

Stearates
Franks Chemical Products Co.
Mallinckrodt Chemical Works
M. W. Parsons, Imports

Talc
Innis, Speiden & Co.

Titanium Dioxide
Titanium Pigment Co.

Zinc Oxide
New Jersey Zinc Co.

Containers & Machinery

Bottles
Carr-Lowrey Glass Co.
Hagerty Bros. & Co.
Hart Glass Mfg. Co.
Hazel-Atlas Glass Co.
Maryland Glass Corp.
Owens-Illinois Glass Co.

Boxes & Cartons
Crosby Carton Co., Inc.
H. R. M. Gordon
C. F. Hatch Co.
National Metal Edge Box Co.
Douglas Young, Inc.

Collapsible Tubes
National Collapsible Tube Co.

Labels
John Horn

Glassine Paper
Riegel Paper Corp.

Packing Material
Kimberly-Clark Corp.

Vials
Kimble Glass Co.

Corks
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.

Metal Caps
Aluminum Seal Co.
Anchor Cap & Closure Corp.
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.
Crown Cork & Seal Co.
Ferd. Gutmann & Co.
Phoenix Metal Cap Co.

Molded Caps & Containers
Anchor Cap & Closure Corp.
Armstrong Cork & Insulation Co.
General Plastics, Inc.
Resinox Corp.

Liners
Armstrong Cork & Insulation Co.

Tablet Counting & Filling Machinery
John W. Ayers & Son

Capping, Filling & Packaging Machinery
Arthur Colton Co.
Karl Kiefer Machine Co.
Geo. G. Rodgers Co.
F. J. Stokes Machine Co.
Stokes & Smith Co.
U. S. Bottlers Machinery Co.

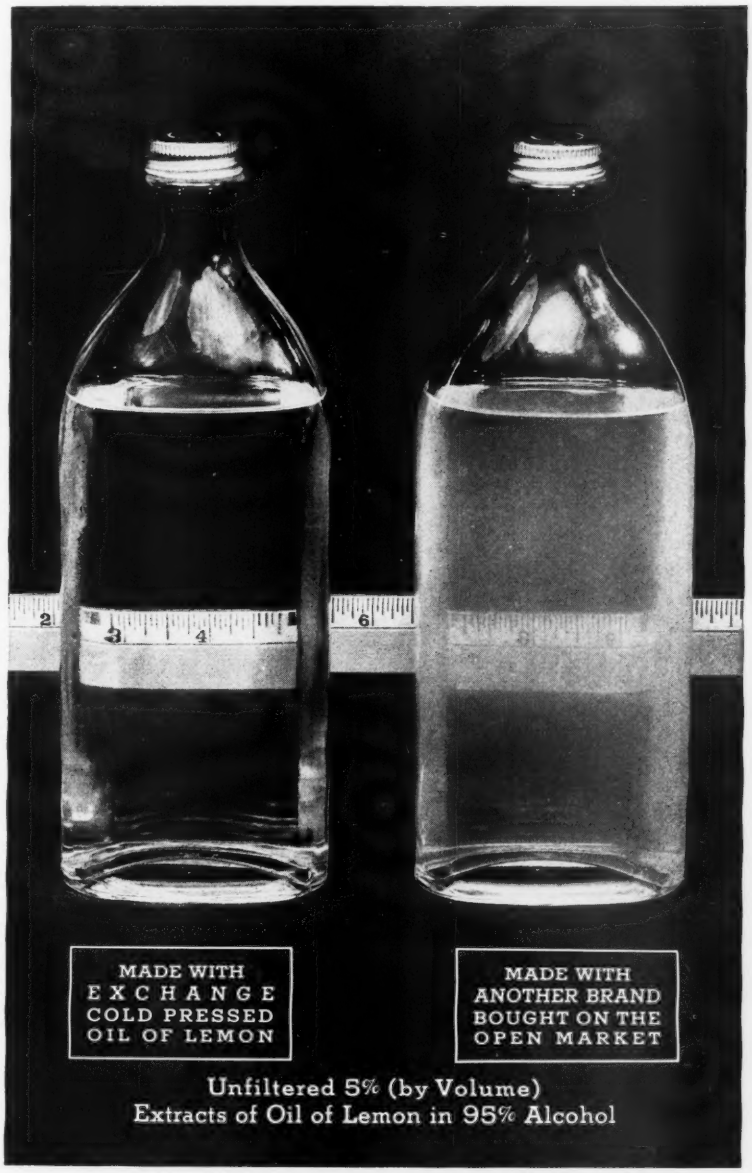
Tanks, Kettles & Mixing Equipment
Ertel Engineering Corp.
Pfaudler Company
F. J. Stokes Machine Co.
U. S. Bottlers Machinery Co.

Production Equipment
Ertel Engineering Corp.
Karl Kiefer Machine Co.
Pfaudler Company
U. S. Bottlers Machinery Co.

JUST ADD ALCOHOL

Get a CLEAR Lemon Extract!

NO CLOUD . . . NO SEDIMENT
NO FILTRATION . . . NO WASTE



A 5% by volume solution of Exchange Oil of Lemon in alcohol conforms to the U. S. Government's definition for lemon extract.

UNIQUE among oils of lemon, Exchange Brand gives a crystal clear, lemon yellow extract when dissolved in alcohol.

The exclusive Exchange process of manufacture removes the insoluble substances causing sediment and cloud.

Other Qualities Improved

Materials that must be eliminated if a clear extract is desired have been removed by the application of Exchange methods of production control to rich California Lemons. You do not have to filter alcoholic extracts made with Exchange Oil of Lemon; thereby saving time and costly loss of oil. It is uniform in performance; stable in your finished product.

Results Demonstrate Economy

Order a supply today. Compare the results it gives; see how it saves "grief." Then compare the cost, and see how it saves you money.

QUICK FACTS

1. **Flavor** that suggests a freshly-cut lemon
2. Finer **Aroma**
3. Deep natural **Color**
4. **Stable** in your finished product
5. **Uniform Performance**
6. **Lower Cost** per unit of flavor

AND NOW...

7. **CLARIFIED.** No sediment. No cloud. No **filtration.** No waste.

Sold to the American market exclusively by

DODGE & OLCOTT COMPANY
180 Varick Street, New York City

FRITZSCHE BROTHERS, Inc.
78-84 Beekman Street, New York City

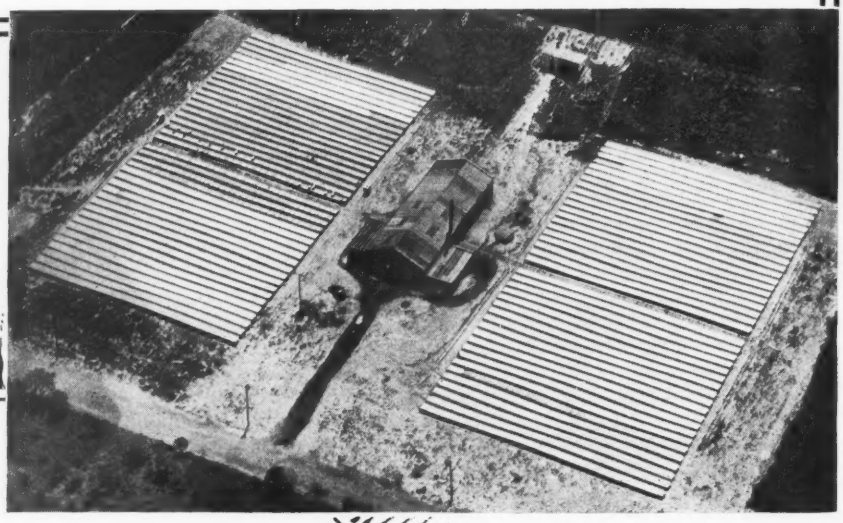
Distributors for

CALIFORNIA FRUIT GROWERS EXCHANGE
Products Department, Ontario, California
Producing Plant: EXCHANGE LEMON PRODUCTS CO., Corona, Calif.

Exchange

OIL OF LEMON

KOSTER KEUNEN



SUNBLEACHED BEESWAX

At Sayville, Long Island, where sunlight conditions are ideal, we are now refining the same fine quality beeswax which the home plant at Aalst, Holland, has made famous for 80 years.

Critically selected crude, ideal conditions for bleaching, more than forty years direct experience in sunbleaching beeswax by the resident American director produce a superfine beeswax ideally suited for cosmetics.

May we send samples and quote prices in any quantity?

KOSTER KEUNEN

SUNBLEACHED and YELLOW BEESWAX

Sayville (Long Island) New York

Beeswax guaranteed 100% sunbleached without any chemicals. Visit our bleacheries and convince yourself.

Represented in New York and New England by

Wallace A. Bush Chemical Corp.
300 Fourth Ave., New York, N. Y
Phone: ALgonquin 4-2177

GIVAUDAN-DELAWANNA INC.

LE CHIMISTE
De la Galerie de S.A.S. Monseigneur le Duc d'Orleans

80, FIFTH AVENUE_NEW-YORK

TUBEROSIS

This new product---a synthetic tuberose---is real "news" for perfumers! TUBEROSIS, developed after long effort at our Geneva plant, has a truly remarkable resemblance to the natural product---and yet, being synthetic, it is neither costly nor subject to price fluctuations.

With TUBEROSIS available, there is no longer any need to deprive your line of the delightful Tuberose note.

$65.00 per pound

GIVAUDAN - DELAWANNA INC.

80 FIFTH AVENUE, NEW YORK, N. Y.

BRANCHES

Philadelphia, Los Angeles, Atlanta, Cincinnati, Detroit, Dallas, Baltimore, New Orleans, Chicago, San Francisco, Montreal, Havana

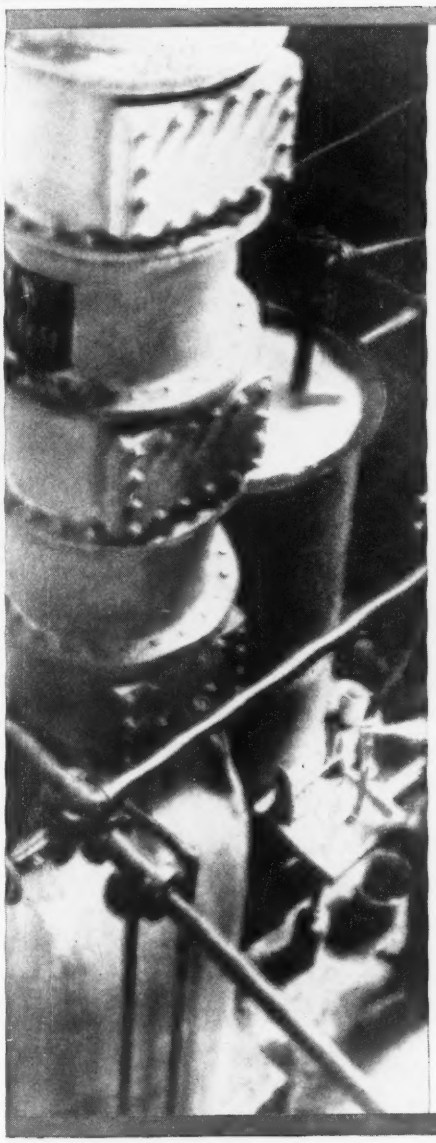
Did you get a copy of this interesting folder on Sampling?

VALUABLE suggestions on sampling—how to effectively put your products into the hands of thousands of prospective users—are given in this new Kimble folder. It illustrates many types of Kimble Automatic Machine Made Vials suitable for modern, inexpensive and sales-winning packaging. A copy will be forwarded promptly on request.

KIMBLE GLASS COMPANY

VINELAND, NEW JERSEY.

NEW YORK • PHILADELPHIA • BOSTON
CHICAGO • DETROIT



MANUFACTURING methods are only of indirect interest to the buyer. It is final quality that counts. But one depends on the other and it is assuring to know that at Monsanto every modern facility, every refinement in manufacturing is put to work to achieve and safeguard the unusual high quality that makes Monsanto products outstanding.

Your basic materials must be *made right* to give ultimate satisfaction.

Monsanto products for the pharmaceutical industry include:

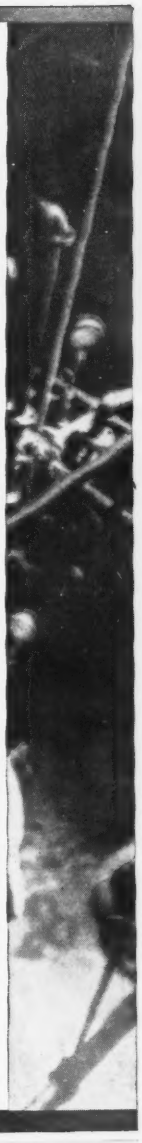
Acetyl Salicylic Acid U. S. P.
and Starch Granulations
Aspir Gran
Acetphenetidin U. S. P.
Caffeine U. S. P.
Chloramine U. S. P.
Phenolphthalein U. S. P.
Salicylates
Glycerophosphates

Manufactured by

Monsanto Chemical Company
ST. LOUIS, U.S.A.

New York ▲ Boston ▲ Chicago ▲ San Francisco ▲ Montreal ▲ London

CHEMICALS ★ QUALITY
Monsanto
ST. LOUIS U.S.A.



BIGARADIA

Vidal-Charvet

Recently, our principals have further developed and perfected to our entire satisfaction BIGARADIA V-C, an unusually fine Orange Blossom note.

BIGARADIA V-C is the ideal base of the Orange Flower type for high class and medium priced perfume extracts. For this purpose it has no superior in its type. Exhaustive laboratory tests show its unusual adaptability also for use in toilet waters, face powders and talcs where this character is sought.

The characteristics of BIGARADIA V-C at once suggest its use with such other products as natural Neroli, Orange Blossom Absolute, practically any Muguet or Valley Lily and in all light floral odors to complete some exceedingly fine compositions.

$18.00 per pound

Let Us Send You A Testing Sample!

UNGERER & CO.

13-15 West 20th Street

NEW YORK

Baker's Bromides
AMMONIUM-POTASSIUM-SODIUM
Are Free from Solution Cloudiness

Because of their high quality and absolute freedom from cloudiness and other extraneous dirt in solution—BAKER'S Alkali Bromides are used in countless medicinal and pharmaceutical preparations.

Unusually clear, white and free running, they equal or exceed "U.S.P." Photographers and engraving plants will also appreciate the unvarying quality of these Bromides.

Write for samples and prices. Tell us your requirements.

J. T. BAKER CHEMICAL CO.
Phillipsburg, New Jersey

New York	Philadelphia	Chicago
420 Lexington Avenue	220 South 16th Street	624 South Michigan Blvd.

MANUFACTURERS OF
"Baker's Analyzed"
C. P. CHEMICALS AND ACIDS

Changing ?

HOW ABOUT A STOCK CONTAINER LIKE THIS

Are you planning to ride in full sway on the tide of recovery—with a brand new package? Then lose no time in consulting Owens-Illinois —where glass packaging ideas abound and constantly improved processes of manufacture make possible their realization. *OnIzed* containers offer you an excellent and economical way to improve your package and get your full slice of the new market which is awakening.

Make your selection from our extensive *OnIzed* line—comprising stock shapes and sizes of all types of modernized glass containers for cosmetics and proprietaries. Styles are designed to be used with modern closures which afford permanent protection to the contents, while permitting easy opening and a simple and efficient re-seal. *OnIzed* containers are "right for the times". Send today for samples and complete information. Owens-Illinois Glass Company, Toledo, Ohio.

OWENS-ILLINOIS

OnIzed
PHARMACEUTICAL AND PROPRIETARY WARE

Are You Familiar With Pfaudler's" Half Century of Progress"?

PFAUDLER glass-lined steel equipment has had a remarkable development in the last 50 years.

We can't tell the whole story here but in two important phases—service and design—extensive advances have been made, particularly in the last 10 years.

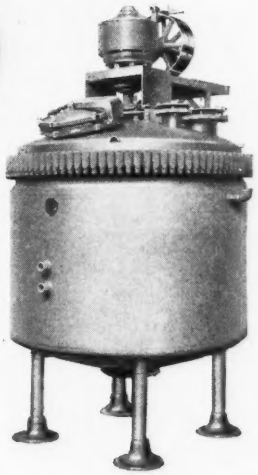
Pfaudler glass enamels, for instance, have been the subject of continuous research which has yielded longer life under a still wider range of corrosive operating conditions.

When it comes to design, you will find a variety of standardized process units—reaction kettles, mixers, autoclaves, evaporating pans, condensers, tanks and even pipe and fittings, some of which are illustrated here.

So if you are troubled with corrosion, product contamination or inefficient mixing, let us send you further data. Pfaudler equipment has the fewest limitations for service of any material of construction available.

THE PFAUDLER COMPANY, 1509 Gas & Electric Bldg., Rochester, N. Y. Branch offices: New York, 8 West 40th Street; Chicago, 1442 Conway Bldg.; Elyria, Ohio; San Francisco, The Pfaudler Sales Company, 122 New Montgomery St.

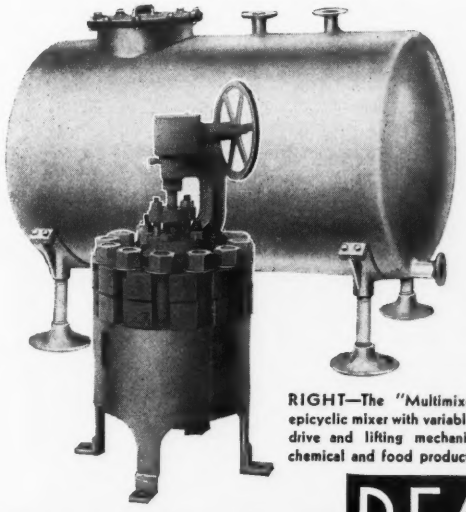
Pfaudler

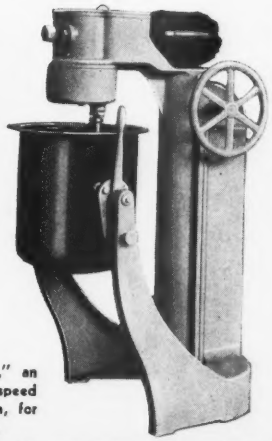


RIGHT—One of 50 different standard Pfaudler glass-lined reaction kettles from which you can choose, ranging in capacity from 2 to 500 gallons. To meet special requirements of most operations, various standard parts can be adapted with a substantial saving to the user.

BELOW—Glass-lined steel solvent storage tanks (horizontal or vertical) are as essential to product purity as the processing equipment itself. Capacities range from 100 to 9250 gallons.

LEFT, BELOW—Glass-lined autoclave available for experimental work; built to withstand 1000 lbs. pressure per square inch. Agitator optional.

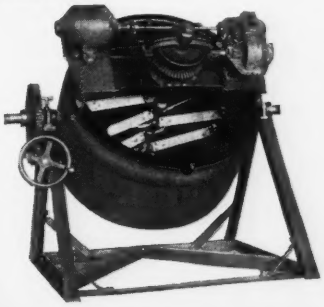




RIGHT—The "Multimixer," an epicyclic mixer with variable speed drive and lifting mechanism, for chemical and food products.

RIGHT—Standard steam jacketed evaporating and crystallizing pan; 12 to 150 gallons.

BELOW—Steamjacketed tilting kettle with double motion agitator for products like cold cream.



GLASS★LINED PFAUDLER EQUIPMENT

GUARDING THE REPUTATION *of this Parke-Davis "family" are tight-sealing, uniform Armstrong's Corks.*

IT'S important business—getting a closure that can be trusted to safeguard the quality, purity, and good name of a product. And no one realizes this more than the famous drug and pharmaceutical houses with whole "families" to look after. That's why so many of them standardize on Armstrong's Corks.

They know that these clean, lively corks can be relied on to seal and reseal tightly. That users will not be inconvenienced with a cork that's difficult to remove. They know, too, that Armstrong's Corks will pass through their production line swiftly and smoothly. No below-grade corks to cause trouble of *any* kind.

You'll like the accurate shape and dependable grading of Armstrong's Corks. And if you have a package designing or sealing problem, you'll appreciate the expert, unbiased advice that is available to you free through Armstrong's Package Styling Department and testing laboratory. No obligation. Just write, outlining your needs, and send samples to Armstrong Cork & Insulation Company, Closure Division, 913 Arch Street, Lancaster, Pennsylvania.

Armstrong's Corks

A Grade for Every Need... Every Sack Guaranteed

1/3 OF YOUR MARKET

Farm women's faces are brightening—with prosperity—and cosmetics!

Farm emergencies require a supply of medicines and first aid requisites.

The farm woman buys for ten million homes. She represents a third of the American market for drugs and cosmetics.

One magazine, and one magazine only, is published exclusively for her.

THE
FARMER'S WIFE
Webb Publishing Company
NEW YORK SAINT PAUL CHICAGO

The makers of these products are cultivating this great market through The Farmer's Wife:

JONTEEL FACE POWDER
SLOAN'S LINIMENT
BAUER & BLACK (BLUE-JAY)
CASTORIA
SMITH BROS. COUGH DROPS
MENTHOLATUM
LUDEN'S COUGH DROPS
CUTICURA
FROSTILLA
JOHNSON & JOHNSON (BABY POWDER)

OCTOBER SUGGESTIONS

Acid Acetylsalicylic
Acetanilid
Acetphenetidin
Caffeine Alkaloid
Caffeine Citrate
Camphor
Monobromated
Codeine
Morphine
Quinine & Salts
Sodium Salicylate
Sodium Benzoate
Sodium Citrate
Sodium Bromide
Antipyrine
Amidopyrine

•

AT THE WORLD'S FAIR

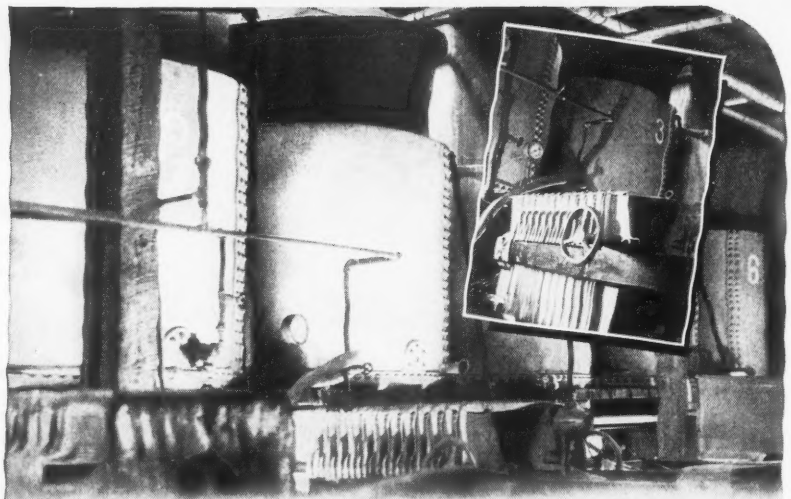
The Voice of
MALLINCKRODT
tells the complete story
on Iodides

•

REMEMBER THE FULL LINE OF MALLINCKRODT REAGENTS

•

Special Catalog on Request



IODIDES

Mallinckrodt Potassium Iodide U.S.P. is made to meet an unusual standard of purity. It is free from any foreign odors, exceptionally low in chlorine and free alkali content.

Potassium Iodide is one of 57 iodine products developed by Mallinckrodt over a period of sixty years.

FOURTEEN IMPORTANT IODINE PRODUCTS

Ammonium Iodide U.S.P. IX
Cadmium Iodide
Calcium Iodide
Iodine Tincture U.S.P.
Iodine U.S.P. Resub. & Gran.
Iodoform U.S.P. Powd. Light & Heavy
Mercury Iodide U.S.P. Red & Yellow
Potassium Iodate
Potassium Iodide U.S.P. Cryst., Gr. No. 70 Powd.
Sodium Iodide U.S.P.
Syrup Iron Iodide U.S.P. (Ferrous)
Thymol Iodide U.S.P.

CHEMICAL WORKS
ST. LOUIS — *Mallinckrodt* — NEW YORK
Makers of Fine Medicinal Chemicals

ST. LOUIS · CHICAGO · PHILADELPHIA · NEW YORK · TORONTO · MONTREAL

A Divided Industry

WITH reference to the proposed Food and Drugs Act, the manufacturing industry is again divided in its opinion. *Indications at the moment are that opposition to the* measure will be of varying degrees of intensity. By this we mean that manufacturers of pharmaceuticals and ethical specialties will not attack the new bill on so many points as will manufacturers of proprietaries advertised directly to *the public.*

THERE seems to be no subject upon which the entire drug trade can be of one mind. *Certainly such a bill as the* Tugwell bill would be expected to unite at least the manufacturing industry along a solid front of opposition. But *such is not the case.*

THE real answer lies in the fact that some branches of the industry are apt to gain while others lose. There is no questioning the premise that ethical manufacturers will increase their volume if the proprietary industry is forced to curtail its advertising effort. At the same time there is no questioning the fact that the first line of defense of the entire drug industry will fall if the proprietary industry is placed under such stringent regulations as are proposed in the new measure. However, ethical manufacturers are of the *opinion that it is not their job to pull the coals of all the* proprietary manufacturers out of the fire, especially since they feel that such complete opposition to any change might endanger their own position.

OPPOSITION to the new act must be carefully approached. There must be no display of an attempt to preserve the vested interests at the expense of the public welfare—such times are in the past. Today the interest of the public is paramount, and it is only when the manufacturers' interests and the interest of the public are in common that the manufacturer will make any progress.

The Ten Cent Size

It was in March 1928 that this magazine published the results of an original investigation into the question of whether or not the ten cent sizes of drugs and cosmetics sold in the ten cent stores could be merchandised through the drug trade. When we started the investigation we were of an open mind and were willing to report that such merchandise *could* be marketed through drug store outlets. However, the facts were otherwise and we reported the facts.

About a year later, agitation for the marketing of these sizes through drug channels started from another source. Amid great ballyhoo the movement started. Not to allow the entire drug trade to be swept away by such unsound merchandising tactics we sounded two more warnings—one in June 1930, and another in July of the same year.

From then on the movement continued with quite some enthusiasm for a time, but gradually this enthusiasm died as the trade began to face actualities and figure their losses in place of profits. Now the National Wholesale Druggists' Association has passed, at its recent meeting, a resolution calling for a discontinuance of the ten cent counter in the drug store.

There is nothing like facing the facts. We have always tried to do it and we will continue to try to do it, despite the temporary advantages which might accrue from disregarding facts and indulging in a popular spell of hysteria.

• • •

"Outlaw" Retailers

Large scale retailing continues to one of real threats to drug and cosmetic manufacturers. Most of the manufacturers in this industry would be perfectly happy if no grocer ever sold his products. But when the large grocery firms decide to declare themselves as a part of the distribution of the products of this industry, then manufacturers must give real thought to whether or not they are going to sell their products to these outlets.

It can be taken as a fact that the very large majority of manufacturers will sell any retail outlet if that outlet is an important distributor of the type of products which the manufacturer produces. And even though a large manufacturer closely allied with the wholesale and retail drug system might at first refuse to sell, at such time as the new outlet proves itself an important factor in the distribution setup, this manufacturer will be likely to change his mind.

The manufacturer can not be blamed for this procedure. The fact of the matter is either that his competitors are selling the outlets and thus obtaining a larger share of the business than they are entitled to, or else the retail outlet has decided to sell its own brands and disregard the products of all manufacturers. Manufacturers must take such steps as are necessary to protect their businesses. Many times, a decision to sell what the drug distributing trade regards as an outlaw arises solely from this fact.

• • •

Cosmetics in the Drug Act

An interesting opinion regarding inclusion of cosmetics in the proposed Food and Drugs Act was expressed to us recently. The opinion was to the effect that foods and drugs are essential to the public health while cosmetics are not. Therefore, continued the opinion, inclusion of cosmetics in the same bill brings under the direction of enforcement officials a line of products about which they do not need to be so careful, therefore introducing an element which might lead to carelessness on the part of the officials.

We wonder whether such would be the case. From what we have seen of the enforcement of the Food and Drugs Act we are more apt to believe that enforcement of the provisions surrounding cosmetics will be as strict as enforcement of those surrounding foods and drugs, to the end that cosmetics will assume as important a place in the life of the public as foods and drugs now occupy—whether the public wants it that way or not.

Frankly we are not of the opinion that there will be any depreciation of enforcement activities merely because cosmetics are introduced into the Food and Drugs Act. Rather do we think that many cosmetic manufacturers will be forced to regard this branch of the industry in a new light which might easily spell a new day for the manufacture and merchandising of cosmetics.

• • •

New and Non-Official

Vitamins in Cosmetics

That isn't such a bad idea of that agent of the Food and Drug Administration who predicts that there will be vitamins in lipsticks and other cosmetics within a few years.

Then when a gal is up against it, she can look beautiful and eat at the same time. She won't have to worry about starvation as long as she can warm up a little cleansing cream for supper and have some rouge for dessert.

• • •

The Pot and the Kettle

Those druggists who complain about other types of retailers selling household drugs and cosmetics, should first make certain of their own position. Some druggists *have* been known to stock a few items which could hardly classify as drugs and cosmetics.

• • •

Twin-Testing Teeth

Pebeco's latest is the "Twin Test," not to be confused with the "Bite Test," which belongs to somebody else.

• • •

Science & Sales

Last year Woodbury introduced Element 576 to the cosmetic world. This year Woodbury is hailing "a new and unique ingredient" which causes Woodbury's Cold and Facial Creams "to stay germ free as long as they last."

• • •

A Mascu-Line of Cosmetics

The idea seems to be going the rounds that lots of men would buy lots of cosmetics if they were offered at a special men's counter, in a men's department, and packaged in neat, masculine packages.

This isn't new—Pinaud and Bristol-Myers, to mention only two, having gone to the male market ere now—but it seems worth more serious thought. We know of no man who, having tried an after-shave lotion, could ever bring himself to do without it.

Choosing a Trade-mark

By Lenore B. Stoughton

Trade-marks are often the most valuable possession of a manufacturer. With this article we start a series which will disclose information regarding trade-marks not generally appreciated by the average manufacturer.

EVERYONE knows that a good trade-mark can be the backbone of a thriving business. Unfortunately not everyone knows what a good trade-mark is or how to choose one. Mistakes, discovered too late, have brought unnecessary disaster to many a business; and hearing of these unlucky occurrences has made trade-mark questions a bugaboo to many a business man. But this need not, and ought not, be so.

It is needful first to understand what a trade-mark really is, and why we use them. The function of a trade-mark is not to tell what a product is, but to identify its source—the manufacturer or dealer who sponsors it to the public.

In the early years of business in this country, that was not so important. There was little competition in any one field, and consumers were likely to know the names of the established and reputable concerns whose products they wanted to purchase. Furthermore, even if they did not get the particular product they wanted, small harm was done, for standards of quality did not usually vary so much and if a purchaser got the product of a different manufacturer he was likely to be satisfied anyway.

But now competition is keen and every good product —whether new or old—is likely to be followed by a dozen cheap and unworthy imitations. The purchaser who unwittingly gets an imitation of the good product he wanted is dissatisfied, and his personal good will toward the quality product is destroyed or impaired. So, just as the early silversmith proudly placed upon the beautiful things he wrought a "hall-mark" to identify them as the products of his own artistry and skill, nowadays the modern manufacturer or dealer places upon his product a mark which will identify it as the product of his skill or care and distinguish it from the similar goods of other concerns.

To a reputable manufacturer or dealer, such a hall-mark or trade-mark is of inestimable value. It is his guarantee to purchasers that they may buy his product again and again in justified reliance upon the excellence which has first pleased them. The manufacturer's name upon the product really should hold as much meaning, and, as we have said, a few years ago it generally did; but with the present multiplicity of manufacturers the casual purchaser finds it far easier to recall a short phrase or a distinctive design than any one of the many business names—and, indeed, may buy the product repeatedly without ever noticing the manufacturer's name.

So a trade-mark comes to represent that intangible good will which can be measured only by repeated and growing sales. Good will may be—and usually is—by far the most valuable asset of any company, and it should be safeguarded accordingly.

It is true that there frequently arise technical questions regarding registration of a trade-mark or protection of trade-mark rights, on which competent legal advice should be sought. But those questions arise after the business has been established. For the manufacturer or dealer who is preparing to launch a new product, one of the first questions is the choice of a trade-mark, and, generally speaking, his familiarity with the trade, with his product, and with the type of consumer he wishes to reach, make him the person best fitted to determine what trade-mark is going to be of best commercial advantage to him.

Of course he also needs to know what pitfalls to avoid in the choice of a trade-mark. There are a few simple rules which will apply to any business or product, and which can serve as a useful guide to anyone. These rules are easy to remember and follow when one understands the reasons underlying them.

1. There are certain things to be avoided in a trade-mark because they are not registrable under the United States trade-mark statute (Act of February 20, 1905). Briefly, they are: (a) immoral or scandalous matter; (b) the flag or coat of arms or other insignia of the United States, a State, or a foreign nation; (c) any design, picture, or emblem previously used by a fraternal society, institution, club, or society; and (d) names or terms indicating geographical origin.

2. The statute also forbids registration of any word or device which is descriptive of the goods or of their

(*Continued on page 400*)

Wholesalers

STILL proving to be the great meeting of the year at which manufacturers of all classes of drugs and cosmetics meet each other, the fifty-ninth annual meeting of the National Wholesale Druggists Association opened at French Lick Springs on October 2.

Developments at the meeting affected both wholesalers and manufacturers directly. Probably the most outstanding event so far as wholesalers are concerned was the inclusion in the membership of the association of several wholesalers of the "short line" type. The new active members include: E. J. Barry, New York; D. Kaltman & Co., Jersey City; Loewy Drug Company, Baltimore. Spence-McCord Drug Company, LaCrosse, Wis., was reinstated as an active member.

Another interesting development so far as wholesalers are concerned came in the election of officers. Henry Faxon, of the McKesson Faxon Drug Company, Kansas City, Mo., was elected president of the association for the coming year. Mr. Faxon is the first member of the McKesson organization to be elected president of the association since the formation of the present McKesson set-up almost split the organization in two at the Atlanta meeting in 1928. The election of Mr. Faxon therefore marks the healing of the breach, and indicates that the feeling of suspicion and distrust on the part of the two factions has been dispelled.

Other officials elected are: Five Vice-presidents in the following order—J. Mahlon Buck, Smith Kline & French, Philadelphia; J. B. McCormick, W. J. Gilmore Drug Company, Pittsburgh; E. H. DeMoss, McKesson-Peter-Neat Company, Louisville; C. H. Gertridge, McKesson Steward Holmes, Seattle; Kayton Smith, Columbia Drug Company, Savannah; Four members of the Board of Control for three years—John C. Davis, Davis Brothers Drug Company, Denver; Lee Wilson Hutchins, Hazeltine-Perkins Drug Company, Grand Rapids; Charles A. Loring, Gilman Brothers, Inc., Boston; William J. Murray, McKesson-Murray Drug Company, Columbia, S. C.; Three members of the Board of Control for 1933-1934—C. J. DeWoddy, McKesson-Crowdus Drug Company, Dallas; Jesse W. Wynne, McKesson-Van Vleet-Ellis Corp., Memphis; A. Kiefer Mayer, Kiefer-Stewart Company, Indianapolis.

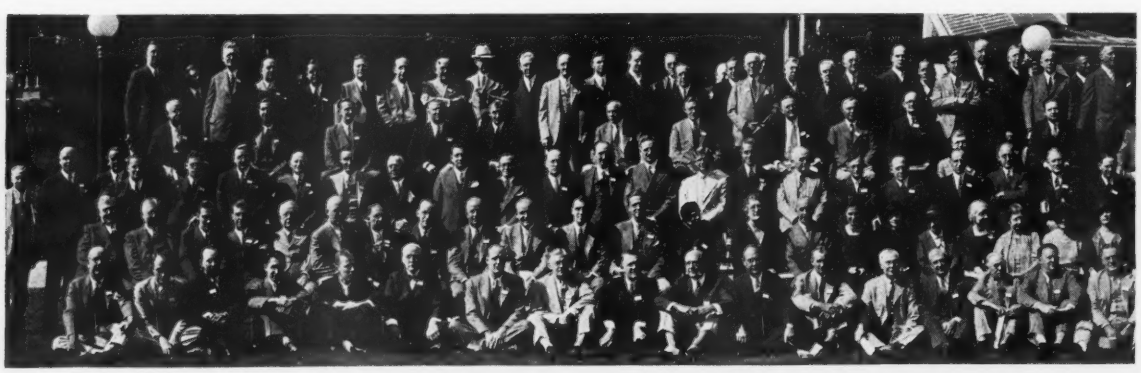
Henry Faxon
The New President

Resolutions passed by the association are of more than passing interest. They include:

Opposition to the proposed Federal Food and Drugs Act, calling upon the entire membership to enlist in a campaign to defeat the measure.

Called upon those concerned with sale of medicinal spirits to recognize the wholesale drug trade as the preferred purveyor of these products after repeal of prohibition.

Recommended discontinuance of the sale of ten cent line in drug stores.



Assembled

Called upon wholesale members to instruct buyers and sales managers to support manufacturers whose policies protect the profit of wholesaler and retailer.

Recommended that members refrain from selling drug store merchandise to grocery stores in towns where drug stores are located.

Empowered association delegates to the Druggists Research Bureau to submit to the directing committee the proposal of placing responsibility for the continuation of the bureau under the Drug Institute of America.

Opposed payment of extra commission to manufacturers' salesmen on orders secured by them and transferred to wholesalers.

Reiterated stand that most satisfactory basis of compensating salesmen is a graduated scale of commission on total net sales.

Authorized survey of all types of insurance, looking toward savings through centralized insurance if fifty members will cooperate in such survey.

One of the interesting sessions of the meeting was that concerned with the Drug Institute of America. Wheeler Sammons, managing director of the Institute opened with a long talk, a very large part of which was a defense of the Institute against its many critics. Many manufacturers spoke in favor of the Institute, including Earl A. Means, Bristol Myers & Company; Northam Warren; James J. Kerrigan, Merck & Company; R. D. Keim, E. R. Squibb & Sons. Mr. Keim stated that the Institute had been oversold to the retailer, and he warned against salesmen promising retailers that the Institute would solve all their problems.

Another interesting session was the afternoon informal meeting of both wholesalers and manufacturers. This meeting was to have been presided over jointly by William J. Schieffelin Jr. and Robert L. Lund. However, Mr. Lund had to leave, and Mr. Schieffelin called upon Jack Norton to preside in Mr. Lund's place.

At this meeting Mr. Lund opened with a talk on operation under industrial codes. Following this, manufacturers and wholesalers spoke upon the various phases of distribution, all pledging support to the wholesalers in their efforts to protect the profits of the retailers.

In the report of the legislative committee given by William J. Schieffelin Jr., Chairman, the following statements were made:

"From the standpoint of the drug trade there is no reason whatever for amending the existing Pure Food and Drug Law. The Food and Drug Administration, however, in the framing of this measure has proceeded upon the assumption that whenever the government loses a case in court under this statute its duty is to rush to Congress with a demand for an amendment to the law so that next time the same issue is raised with a manufacturer or dealer it will be certain to win. In other words, the government always wishes to play the game with loaded dice.

"Among the features of the bill that should receive our careful consideration are its provisions dealing with formulae disclosure; the deviation clause, which has been practically rewritten; the delegation to the Secretary of Agriculture of authority to supplement the official standards under certain conditions; the authorization of civil suits for damages; the extension of the category of dangerous drugs which are to be subject to drastic control, and the inclusion of cosmetics within the jurisdiction of the statute.

"The extension of the Food and Drug Law to cover cosmetics is one of the most radical changes in the bill. Under the present law any manufacturer of toilet articles who holds out his product as possessing any therapeutic value thereby brings it within the category of drugs subject to all the provisions of the Food and Drugs Act. The feeling is very general throughout the toilet goods industry that if cosmetic manufacturers

(*Continued on page 374*)

Chest Rubs

One of the most important winter remedies is the chest rub. Ingredients and method of manufacture for many types are given in this article.

THE faith of the public in preparations, which, when rubbed on the chest, serve to relieve colds has been the basis for the success of a number of well-known firms. Chest rubs have a definite therapeutic value in that they serve to draw blood to the affected area. We present here with a number of typical formulas for this kind of preparation. In so doing we wish to emphasize that success in compounding depends upon three factors: the formula, the grade of raw materials used and the manufacturing procedure. Lack of discriminating experience in any of these essentials is apt to produce varying results. For these reasons we again reiterate that the following formulas are given to stimulate experimentation and it is urged that careful testing and shelf aging precede any attempt to place such products on the market.

NO. 1.

Benzoated lard	400 grams
Olive oil	100 "
Mace oil	36 "
Eucalyptus oil	10 "
Tincture benzoin	15 "
	561 grams

Procedure: Melt the lard, add the olive oil and the mace. Add eucalyptus and tincture of benzoin.

NO. 2.

White petrolatum	400 grams
Heavy mineral oil	200 "
Eucalyptus oil	50 "
Menthol	10 "
Oil of turpentine	10 "
	670 grams

Procedure: Dissolve the menthol in the eucalyptus. Melt the petrolatum and then add the mineral oil. Pour in the eucalyptus and stir. Finally add turpentine.

NO. 3.

White petrolatum	500 grams
Lanolin, hydrous	50 "
Soap liniment U. S. P.	100 "
Tincture aconite	50 "
Chloroform	25 "
	725 grams

Procedure: Melt the lanolin and the petrolatum. Add the soap liniment and then the aconite and chloroform.

NO. 4.

Goose grease	500 grams
Lanolin, hydrous	200 "
Petrolatum	200 grams
Camphor	25 "
Oil of turpentine	50 "
Oil of lavender	15 "
	990 grams

Procedure: Melt the petrolatum. Stir in the goose grease and the lanolin. Mix the camphor with a little of the melted fats until dissolved then add to the rest of the batch. Add the turpentine and the lavender.

NO. 5.

Petrolatum, white	500 grams
Oil of mustard	30 "
Camphor	10 "
Croton oil	200 "
	740 grams

Procedure: Dissolve the camphor in the croton oil, stir it into the petrolatum and finally add the oil of mustard.

NO. 6.

Cold cream	600 grams
Pulverized mustard	200 "
Lanolin, hydrous	200 "
	1,000 grams

Procedure: Make the cold cream in the usual way. Melt and add the lanolin. Mix in the mustard.

NO. 7.

Vanishing cream	600 grams
Lanolin, hydrous	100 "
Mustard, ground	150 "
Camphor	20 "
Methyl salicylate	30 "
	900 grams

Procedure: Dissolve the camphor in the methyl salicylate. Mix the vanishing cream and the lanolin. Rub in the mustard. Add the methyl salicylate.

NO. 8.

Menthol	10 grams
Chloral hydrate	100 "
Camphor	100 "
Lanolin anhydrous	300 "

(*Continued on page 404*)

Cosmetic Colors

By Everett G. McDonough, Ph. D.

Not so many years ago the coloring problem of the cosmetic chemist was a simple one. For example, in the production of a face powder with a rachel or an ochre shade he used a natural occurring Ferric Oxide, Ochre; a flesh or naturelle was obtained by using a pink concentrate made by spraying a water solution of eosine onto a white powder, such as precipitated chalk, and drying.

To the cosmetic chemist of today both of these coloring agents have obvious disadvantages. The natural occurring Ochres are gritty, dirty in tone and do not possess great tinctorial strength. They frequently contain objectionable metallic compounds. The eosine concentrate is difficult to duplicate to a standard shade and fades rapidly in sunlight; also being water soluble, perspiration streaks are noticeable.

Synthetic Ochres are gradually superseding the naturel Ochres. They are made by precipitating an Iron salt with an Alkali such as (Sodium Hydroxide). Water-soluble Eosine on precipitated chalk has largely been replaced by lakes made by precipitating a coloring matter (a coal tar dye) on a carrier (the base). The precipitating agents used for coal tar colors are aluminum hydroxide, barium chloride, lead salts, tannin or tannin tartar emetic. The first type of lakes used in the cosmetic trade were made by precipitation of a coloring matter (eosine), the precipitating agent being lead acetate. In addition to the disadvantage of toxicity, the lead lakes also tended to bleed. For the cosmetic trade the aluminum and possibly the barium precipitated lakes are to be preferred. One group of lakes largely used in the trade and which gives excellent results is produced by precipitating from a water-soluble halogen derivative of fluorescein with a soluble aluminum salt in the presence of Sodium Benzoate. The lakes formed are reported to be non toxic and remarkably free from bleeding. The more important carriers are aluminum hydroxide, zinc white, lithopone, barytes, whiting, china clay and certain native clays, and ochre. Carriers should be readily reduced to a finely grained state and should not exert any harmful effect on the shade of the finished lake. The more popular carriers in the cosmetic trade are Aluminum Hydroxide, Kaolin and Talc. The coloring matter includes groups of coal-tar dyes known as acid dyes, basic dyes, and mordant dyes, as well as certain azo dyes produced directly on the carrier. Another group of color lakes is made by precipitation of a water-soluble acid dye, with the aid of a mineral salt to form an insoluble product.

Since the advent of night shades or evening powders, with their greenish and orchid tint, and the introduction of the true clear neutral or peach shades with their fancy names, many new lakes have been drawn into use by the face powder manufacturer.

Oil soluble colors are rarely used in the manufacture of cosmetics today. In the manufacture of rouges and lipsticks, the lakes give the true tones much more satisfactorily to milady's critical and educated eye both before and after application. For permanency a cell staining dye such as tetrabrom fluorescein must be included. (The mono- and di-brom derivatives are also known and frequently occur in eosine, and this affects the shade for the more bromine present, the redder the dye).

Nail enamels now demand a wide variety of shades. The lacquer industry is far in advance of the cosmetic trade here and any tried "solvent soluble" dyes can be procured. The solvents used in dissolving the nitrocellulose may vary considerably from aliphatic aromatic hydrocarbons, esters, alcohols, Ketones, etc. A dye that might be satisfactory in one nail enamel would not even be soluble in another.

Certain opaque nail enamels are becoming increasingly popular. They are made by the incorporation of so-called "Toners." These toners are Tungstates-precipitated dyes and give best result by grinding them, thoroughly, in a plasticizer, such as castor oil. They are very permanent to light.

Solutions that come under the classification of lotions were dependent in the past upon three coloring agents. For amber, caramel was used. Caramel or sugar dye is formed by heating cane sugar. For a green lotion, the coloring matter of green plants, chlorophyll is used. For the pink shades, eosines and rhodamines are used. Even today these colors still give excellent results and are widely used. Naphthol yellow is also used to some extent.

In the acceptance of any cosmetic color, it must be considered of utmost importance that in addition to physical and chemical properties, tintorial strength, color, fastness to light, compatibility, etc., there must also be thoroughly investigated the physiological actions of the coloring agent.

In the cosmetic industry there has been a complete lack of any correlated information on the subject of cosmetic colors. Rarely does the cosmetic manufacturer know what color he is using. If it works he is satisfied, if it doesn't then he tries another and another until one gives sufficiently good results.

About two years ago Dr. Davidson, under Prof. Bogart's guidance and with the help of an A. M. T. A. Fellowship, interviewed most of the leading technical men employed by cosmetic manufacturers, attempting to find a problem, the solution of which would be of greatest service to the trade. Almost without exception came the request for standardization of colors used in the cosmetic trade. In an attempt to find out what colors were being used in the cosmetic trade a survey card was sent to 48 manufacturers of colors. Ten manufacturers replied that they did not carry colors used in cosmetics, twenty-two did not reply and three manufacturers declined to give the information requested. It is to be regretted that the survey was only practically started when, due to expiration of the Fellowship, it had to be discontinued. The results of this preliminary survey were printed and distributed to members of the A. M. T. A. Ninety-six colors were reported. Many of these are obvious duplications. The descriptive comments were quite meagre and quite a few did not include the disclosure of the chemical constituent, and were therefore of practically no value. In spite of these faults the information contained is of value and should serve as a stimulant for sharpening the appetite for more knowledge regarding cosmetic colors and their standardization.

Much valuable assistance can be obtained from allied fields. Perhaps the greatest assistance would be "Color Index" edited by F. M. Rowe. The Society of Dyers and Colorists in publishing this book states that "the main object has been to produce in English language as accurate and comprehensive a work of reference as possible—one that would meet the requirements alike of Intermediate and Color Makers on the one hand, and Color Users and Students on the other." Conspicuous by its absence both in the original and the supplemental editions is the inclusion of "cosmetic" in the listing of "Synthetic Organic Coloring Matters used for Purposes other than dyeing of Textile Fibres." Foodstuffs, Indicators and Analytical Purposes, Medicine, Microscopic Stain, Inks, Oil Waxes, Spirit Varnishes, etc., Pigments, and Photography, are duly noted, but no Cosmetic. It would truly be a wonderful aid to the Cosmetic industry if their colors could be classified in this excellent reference book with full descriptive comments and notations of important physical, chemical and physiological properties.

Industry's Books

Chemical Economics, by Williams Haynes, 310 pages, D. Van Nostrand Co., Inc., New York, $3.25 net.

Chemical economics becomes a vivid, moving narrative when translated into understandable terms by the sympathetic pen of Williams Haynes. Perhaps no other living American is as well qualified to do this kind of a job on this particular subject. He has taken the economics of chemistry and the history of the industry in this country, infused them with much of his own enthusiasm and vigor, and the result is a very readable, highly interesting book.

The first part of the book deals with materials and methods. It is called "Economic Foundations of the Chemical Industry" and deals with chemicals in industry; chemical production; chemical supply and demand; cost, value and price; and chemical distribution.

Part two deals with men. It is called "Historical Background of the Chemical Industry" and a naturally interesting subject becomes fascinating when related in the author's vivid, pulsating narrative style. Here he treats of industrial evolution, American chemical backgrounds, American chemical industries, World War and chemical industry, cartels and consolidations, American chemical mergers and the chemical future.

The book is well illustrated, a number of full page, bleed photographs being particularly effective. It will unquestionably be of value to all those interested in chemistry, in industrial chemistry, or in chemical economics, but it also passes a far more severe test—that of interesting the ordinary lay reader who has no familiarity with any of these things.

Industry's Coming of Age, by Rexford Guy Tugwell, 271 pages, Columbia University Press, New York, $2.00 net.

This revival of Mr. Tugwell's book written in 1927, paves the way for his best-seller, "The Industrial Discipline," recently published. He points out that industry has a powerful capacity for good under proper public understanding and control. Here is the description and analysis which he believes to be the beginning of this understanding and control.

Air Conditioning, by James A. Moyer and Raymond U. Fittz, 375 pages, McGraw-Hill Book Co., New York. $4.00 net.

The first half of this book covers theoretical fundamentals and discusses such phases of air conditioning as air filtration, refrigeration, humidity control, etc. The second half gives a thorough study of design requirements including examples of typical designs and necessary calculations.

Advertising Procedure, by Otto Kleppner, 582 pages, Prentice-Hall, Inc., New York, $5.00 net.

The revised edition of this standard work reappraises the various advertising precepts in the light of the experience of recent years. The procedure of advertising has here been restated in the light of newer methods, media and technique which have been developed.

Synthetic Organic Chemistry In Industry, by George O. Curme, Jr., 29 pages, Columbia University Press, New York, 50 cents net.

A reprint of the 1933 Chandler Lecture, in which part of the discussion is devoted to medicinal chemicals and the contribution of synthetic organic chemistry.

Impact of the Depression on Business Activity and Real Income in Minnesota, edited by Roland S. Vaile, 59 pages, University of Minnesota Press, Minneapolis.

A preliminary analysis of the impact of the depression within a large area with diverse industries, on the premise that a comparison of the intensity with which it has affected various aspects of economic life will help to show its unequal effect upon different sections of the community.

New Medicines

We continue to search the foreign literature for new products which indicate the trend of therapy abroad.

Eucalyptus-Menthol Inhalant "Esseff"—Clear liquid used for inhalation. Contains principally menthol and oil of eucalyptus. For affection of respiratory passages. Also for use as an after-inhalant after using other preparations as inhalants. Flasks containing 40 and 250 grams. Sauerstoff Fabrik Berlin, G.m.b.H., Berlin.

Extractum Parathyreoideae Nordmark—Clear, colorless liquid in ampules. Active ingredient is parathyroid gland extract, adjusted to Collip hormone units. One cc. contains 50 Collip units. Used in substitution therapy in various diseases and disturbances in functioning of parathyroid glands, being indicated particularly for treatment of tetanus, chorea, osteomalacia. Also to aid in administration of calcium in those diseases, in which an increased calcium diet is desirable; for treating dermatoses, eczemas, urticaria, psoriasis, morbus Basedowii. Dose, 2 to 3 injections weekly, each 1 cc. intramuscularly. In cases containing 3 to 6 ampules each 1 cc. Nordmark-Erke G.m.b.H., Hamburg, 21, Germany.

Faekol—Tablets. Contain extractum spec. mod. parat. Boldo, Syzyg. Myrtill. Faseol. Faex med., egg lecithin, sodium lactate, lithium phenyloformate, insulin-containing lipoid-free pancreas. For diabetes.

Habormenth—Catarrhal salve containing boric acid, menthol, paraffin, lanolin and aromatic substances. Furnished both with and without suprarenin and novocaine. Laboratorium Dr. Lindner, Karlsruhe, Germany.

Helabon—Capsules. Each contains 0.85 gram of mixture of diethylbarbituric acid, phenyldimethylpyrazolone and dimethylaminophenyldimethylpyrazolone. *For nerve troubles. Dr. Rentschler & Co. Fabrik* Chemische-Pharmaceutische und Technische Praeparate.

Hemostra "Roche"—*Sterile solution of amino acids,* tryptophan and histidine for anaemia according to Fontes and Thiovolle. One cc. contains 0.02 gram *tryptophan and 0.04 gram of histidine. For anaemic* diseases, pernicious anaemia, secondary anaemia; for use in difficult convalescence after fever diseases; also *asthenia due to chronic troubles, particularly in tuberculosis;* preliminary treatments before major surgical operations. Dose: *1 to 2 times daily; 1 ampule of 5 cc.* injected subcutaneously or intramuscularly as required. Packages containing 1 and 6 ampules, each 5 cc. F. *Hoffmann-La Roche & Co., A. G., Berlin-Charlottenburg,* Germany.

Herbagetten—Capsules containing 0.49 gram phenacetin, 0.24 gram dimethylamine phenyldimethylpyrazolone, 0.035 gram caffeine citrate and 0.035 gram lithium carbonate. For headaches. Albert Bleichroeder & Co., Berlin.

Iduna Damenperlen—Pills, each about 0.32 gram, coated with sugar and aluminum foil. Contains ground chamomile leaves and binder. For menstrual disturbances. Same preparation is also made with addition of 0.2 gram of apiolum viride in gelatine capsules.

Iduan Drops—Extra strong. Yellow, acid-reacting, slightly aromatic-smelling (particularly cinnamon oil odor) liquid, in which traces of essential oils, very little alcohol, yellowish-red coal tar color as well as small proportions of citric acid and formic acid are contained. Prepared by distillation of various drugs. Chemische Laboratorium Iduna. Berlin-Schoeneberg, Germany.

Imadyl Badtabletten—White tablets, each containing 0.05 gram histamine. For electrophoretic treatment of rheumatic diseases, such as myalgia, neuralgia, arthralgia, and also respiratory disturbances connected therewith, as well as for improvement of peripheral circulatory conditions in traumatic and trophic changes, *such as haematomas, ulcers, contractures;* also for treating boils, acroparaesthesia, Raynaud's and Buerger's diseases, pneumonia, pleurisy and like. *Dose:—to obtain strong action, one imadyl bath tablet,* 0.05 gram histamine, is dissolved in one liter of lukewarm water; for less severe cases, half tablet in one liter of *warm water. Current density in bath is 5 to 10 milli*amperes and duration of treatment up to 10 minutes. Bath can be used 5 to 6 times and can be kept for 3 days. By combination with potassium iodide or salicylate baths, current is reversed in histamine bath *after 5 minutes and an additional 5 minutes' treatment* is given. F. Hoffmann La Roche & Co. A. G. Chemische Fabrik.

Imadyl Salve—White, translucent salve *in tubes.* Contains 2% histamine as active ingredient. For massage and electrophoretic treatment. Same uses as *IMADYL BADETABLETTEN. Same makers.*

(Continued on page 376)

Cleansing Creams

The most important cream to the cosmetic manufacturer is the cleansing cream. Ingredients and procedure of manufacture of the various types are given in this article.

LEADING all other creams in volume of sales, cleansing cream is one of the most stable products of the trade. With the exception of the rolling massage types, they are very easy to make. Because of this few experimenters have paused to consider thoughtfully the functions of cleansing cream or the necessities of the skin to be cleansed. Indeed, some manufacturers are so far afield that they claim for their cream a universality not warranted by the conditions under which cleansing cream must function. The claims made for the so called "all-purpose" creams may be looked upon with a bit of skepticism because such claims are illogical and contradictory. While it is true that any grease or oil applied to the face will cleanse it to a certain extent, it is also true that to effect a thorough cleansing *open* pores are prerequisite. How then can any manufacturer reconcile a claim that his cream is an astringent and also a cleanser?

The pores of the skin are like little thermostats; they expand with heat and contract with cold. Now when a cream containing a high percentage of water is applied to the skin it is obvious that the pores will at once contract and prevent the deep penetration which is essential if the skin is to be thoroughly cleansed. Some chemists who favor cold cream type cleansers argue that such a reaction is momentary and that with continued rubbing the skin warms up and the pores open again. But they overlook the simple fact that water always begins to evaporate immediately upon exposure and in evaporating it abstracts heat from the skin, which causes the pores to contract again. A small amount of water is desirable as it makes possible the emulsion type cream which leaves the skin smooth and soft and non-greasy. Some of the properties of an ideal cleansing cream have been stated to be as follows:

It should liquefy at body temperature.

Its viscosity should be low enough to permit easy spreading but high enough to retain in suspension particles of dirt and insoluble foreign matter.

It should be an emulsion type with a small percentage of water.

It should possess a mild bleaching action.

It should penetrate the epidermis (via natural openings) and contain enough light oils to permit flushing the pores.

It should contain nothing which would be quickly absorbed by the skin.

It should leave the skin smooth, relaxed, refreshed, non-greasy *and clean.*

Very few cleansing creams fulfill all these requirements. From a merchandising point of view every manufacturer should strive to make his cream as nearly ideal as possible and should avoid "all-purpose" claims, because, even though they could be in part substantiated, it is better to sell a woman four different creams for four different purposes than one cream for all purposes. However, it is obviously impossible for us to limit this paper to an ideal cream so in the following formulas an attempt has been made to represent all types including the liquids. The experimenter may select the one which most nearly fulfills his interpretation of the ideal or the demands of his trade. As different experimenters will get different results from the same formula depending upon experience and the grade of materials used, it is urged that each of the following typical formulas be carefully checked and shelf tested before acceptance.

NO. 1. EMULSION, QUICK MELTING TYPE

Petrolatum	36.0
Mineral oil medium	36.5
Ceresin	15.0
Peroxide 17 vols.	3.0
Hydrous lanolin	9.0
Perfume	.5
	100.0

Procedure: Melt the ceresin and petrolatum, add lanolin and oil. Cool and add peroxide and perfume.

NO. 2. QUICK MELTING, MINERAL JELLY TYPE

Mineral oil	50.0
Petrolatum	33.5
Spermaceti	10.0
Stearic acid	6.0
Perfume	.5
	100.0

Procedure: Melt waxes and petrolatum in oil. add perfume when cool.

NO. 3. COLD CREAM TYPE

Beeswax	15.0
Petrolatum	14.0
Mineral oil	50.0
Water	20.0
Borax	.5

(*Continued on page 404*)

PURITY

. . . . . all the way!

T. L.
white
BEESWAX

PIONEER BRAND
PURE REFINED
• YELLOW •
BEESWAX
Ideal for lemon creams
and similar preparations

ONLY PURE WHITE BEESWAX WILL PRODUCE PURE WHITE CREAM. T. L. BEESWAX HAS BEEN THE STANDARD FOR MORE THAN EIGHTY YEARS. SAMPLES ON REQUEST.

THEODOR LEONHARD WAX CO., Inc.

Western Distributor: A. C. DRURY & CO., Importers
106 East Austin Avenue Chicago, Illinois

HALEDON, PATERSON, N. J.
Long Distance Telephone: ARmory 4-1690

Readers' Questions

The large volume of mail received by this department moves us to explain that this department is one for solving difficulties of manufacturers rather than for giving out formulas for any kind of product.

Correction

Under the head of "Cloudy Shampoo" in this department last month, a printer's error caused a statement to read that turbidity in shampoo liquids is due to "*saponification* of the harder soaps" whereas it should have read "the *precipitation* of the harder soaps." This reaction is usually due to minute traces of free oils that saponify slowly on standing, causing a cloudy precipitate.

Brushless Shaves

A number of our customers have written in to say that if they rub in our brushless shaving cream they get a closer and much more comfortable shave. This led us to think that a grease shaving cream made like a light tissue cream might find a ready market especially among men with dry skins. Is there any such thing as a greasy shaving cream? What do you think of this idea? Camden.

We don't think very much of it at all. The thought arises from a fundamental misconception of the function of shaving creams. It isn't the soap or the grease primarily that softens the beard; it is the water. The soap serves to act as a lubricant and provides a relatively stiff medium which holds the hairs erect and makes cutting easier. A greasy cream would be decidedly unpopular because the razor and the face would not be easy to clean. As a matter of fact many brushless creams would work better if their manufacturers advised vigorous rubbing instead of no rubbing.

Powder Ingredients

We have been working on face powder with the idea of putting out something original. What do you think of blanc fixe and bismuth oxychloride as regards their covering power? Baltimore.

Not much. Blanc fixe (barium sulphate) is not new; it has been used to a small extent for years, especially in Europe. But as most of the barium salts are definitely toxic and as barium sulphate is not altogether above suspicion we should advise careful testing before commiting yourself to its use. As to bismuth oxychloride we can see no sound reason for using it because it darkens on exposure to light.

Feminine Suppositories

We are planning to put out a feminine antiseptic in suppository form. What is the best base to use and how big should they be? New York.

The bases commonly used are cocoa butter, sodium stearate and glycerinated gelatin. Cocoa butter appears to be the best since it liquifies readily at body temperature. Make the suppositories so that they weigh about 4 grams each.

Precipitate Forms

We obtained the enclosed formula from a well-known drug house but we are unable to make it without a yellowish precipitate forming. What is causing the trouble? New York.

We are surprised that the reaction which is taking place here is not familiar to our subscriber. It is an excellent example of one of the most widely known incompatibles. Evidently you are adding lime water directly to corrosive sublimate resulting in a reddish-yellow precipitate of mercuric oxide. Change the order of mixing. Dissolve the sublimate in the water, add the mucilage and the rest of the ingredients and add the lime water last and you won't experience any more trouble.

Calamine Lotion

Will you tell us how to make a good calamine lotion? New York.

Try the following:

Calamine	16. grams
Zinc Oxide	30. "
Glycerin	15. "
Oxyquinoline sulphate	4. "
Distilled Water	150. cc.

Dissolve the oxyquinoline sulphate in the water. Mix the dry materials with glycerin, add the oxyquinoline solution.

Product Insurance

We are in a branch of the drug and cosmetic industry, selling to the public and would be grateful if you would advise us as to what are the ordinary trade measures taken by firms to cover themselves against legal action taken against them by a consumer who might have cause for complaint. Newark.

It is the custom for manufacturers of consumer products to take out public liability policies to protect them against damage claims. Although public liability is written by practically every insurance company there are so many points which should be covered in the policy that it would be best for a subscriber to go to a broker who is familiar with our trade and fully conversant with the various points which should be covered. The name of a well-known firm is being sent to you direct.

Seidlitz Powder Wrapping

Can Seidlitz powders be wrapped by machinery and if so where can we get an automatic machine for this purpose? New York.

Yes, these powders can be wrapped by machine and the firms making them are being sent to you direct.

Talcum Powder

We did not know that you have a research department to assist manufacturers in problems arising in the trade until we read Reader's Questions. We'd like your help on the following:

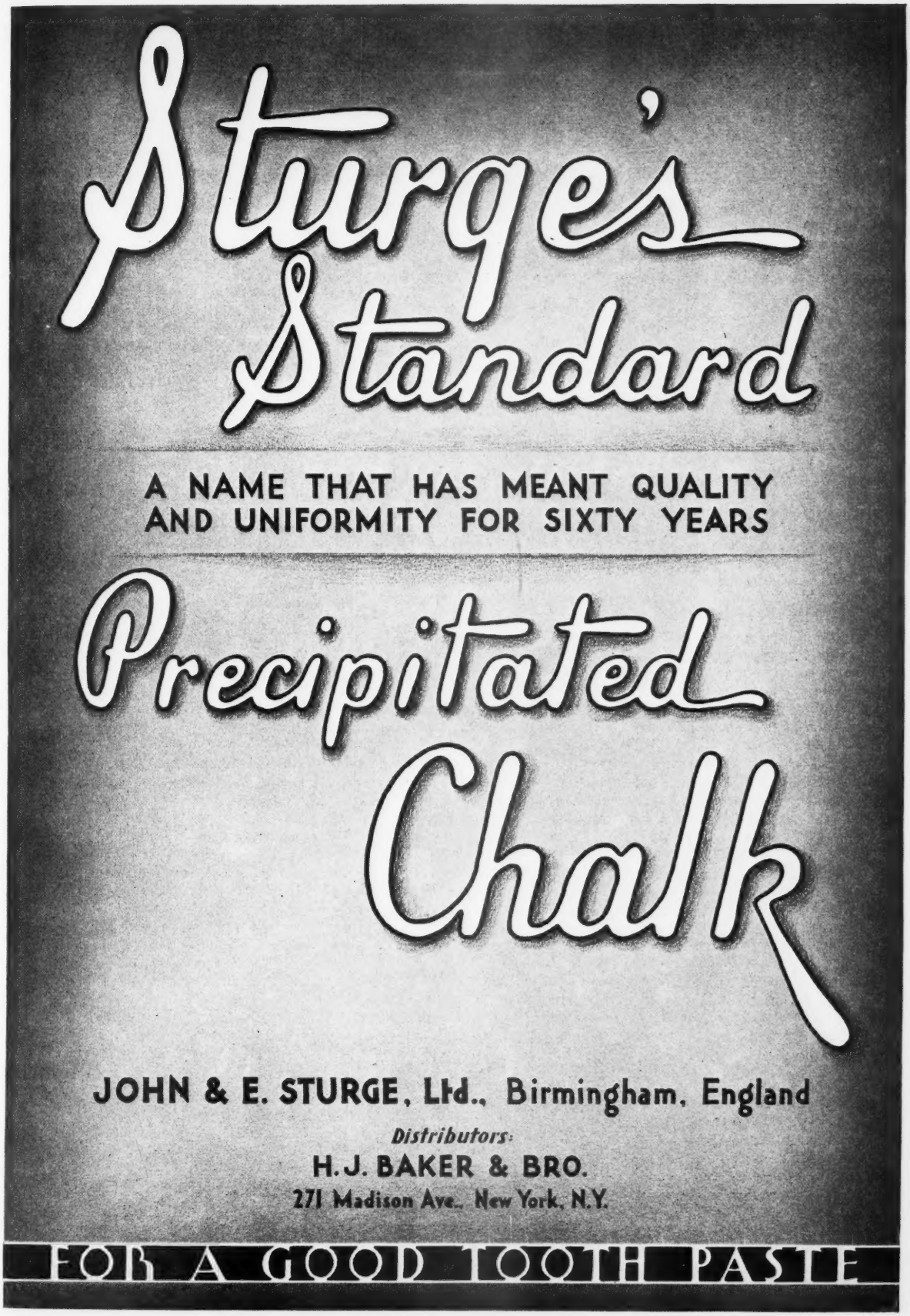
One of our customers want to market a talcum powder containing 6¼% benzoic acid. He would like to know the most satisfactory proportions for the other ingredients. Philadelphia.

Benzoic acid is not commonly used in talcum powders (which in this case is probably intended for baby powder) but our reaction is that such a high percentage would be decidedly irritating. If it is to be used as an antibacterial agent one-tenth of one per cent. would have a marked inhibiting effect. *Boric* acid is commonly used in talcum powder and we wonder if our subscriber hasn't got his acids mixed? A good talcum could be made thus:

Talc	71. grams
Precipitated chalk	20. "
Zinc stearate	3. "
Boric acid	5. "
Perfume	1. "

If our subscriber wishes to use benzoic acid in the above formula we suggest that a half a gram be dissolved in four grams of alcohol and when dissolved add a small amount of precipitated chalk and rub it up thoroughly until all the solution has been absorbed. Then add this to the rest of the ingredients.

(*Continued on page 402*)


Sturge's
Standard
A NAME THAT HAS MEANT QUALITY
AND UNIFORMITY FOR SIXTY YEARS
Precipitated
Chalk
JOHN & E. STURGE, Ltd., Birmingham, England
Distributors:
H. J. BAKER & BRO.
271 Madison Ave., New York, N.Y.
FOR A GOOD TOOTH PASTE

The Compounders' Corner

Taste Correctives

Lecithin tablets are sometimes objectionable because of taste. Ethyl malate, vanilla or mleon oil are best used for correcting this. A 2 to 5% solution of vanilla in lemon oil is suitable. Ethyl malate may be used alone or in mixtures with 7.5 parts of the ester with 100 parts of amyl valerianate and 892.5 parts of alcohol. Suitable mixture is 2 grams of vanilla dissolved in 10 grams of ethyl malate and 3 grams of lemon. Still another suitable mixture consists of 0.1% vanilla, 5% aromatic tincture and 0.2% ethyl malate. Quinine wine is treated with tincture of orange peel, tincture of cinnamon, tincture of cardamomum seed and tincture aromatica. Also useful is addition of strong or weak alcoholic extract of cocoa powder.

Aromatic Formaldehyde Tablets

Suitable formula for these tablets involves use of 1,600 grams white sugar, 60 grams coconut oil, 30 grams gum arabic, 20 grams citric acid, 30 grams paraformaldehyde, 285.5 grams lactoce, 0.5 gram orange flower oil, 1.0 gram peppermint oil, 40 cc. ether and sufficient water. Powdered sugar is screened and worked up with emulsion of coconut oil and gum arabic which is prepared on water bath. About 45 grams of hot water are used. After this mixture has been prepared, enough water is added to obtain a crumbly, moist mass. This product is screened and granulated mass is dried superficially only and screened again and then dried thoroughly at 40 to 50° C. in drying chamber. Mixture of the citric acid, paraformaldehyde and lactose is prepared without pressure and screened. It is then poured over aforementioned preparation and mixture is filled into 5 liter wide-necked bottles provided with stoppers. Mass is then impregnated with solution of essential oils in ether, mixed by careful shaking and allowed to stand for 24 hours. Mass is then spread out on paper, the ether is allowed to evaporate and powder is made into one gram tablets by pressing under high pressure.

Nail Enamel Without Amyl Acetate

Such an enamel can be made from 75.5 parts of bleached carnauba wax, 75 parts of Japan wax, 25 parts of spermaceti, 797 parts of white oil, 2.5 parts of turpentine, 2.5 parts of 8% concentrated acetic acid, 10 parts of ethyl alcohol, 2.5 parts of alkannin and 10 parts of perfume. The wax and the white oil are melted together and then the coloring matter is dissolved in the warm mixture. Then the turpentine, ethyl alcohol and acetic acid are added and the mixture is agitated until cold. The semi-fluid mass is perfumed and poured into containers.

Non-Bleaching Oil Hair Wash

A non-bleaching oil shampoo, which cleans well and is easily washed off with hot water must contain a water soluble oil. Boring oils and other oils of this type, which are soluble in water, are however, unsuitable for this purpose. A turkey red oil, which has been carefully prepared so that the concentration of sulfonated constituent in the oil is fixed, is used. Thus a 70 to 75% concentrated sulfonated oil is employed. When the oil is not soluble in water to a clear solution, it is neutralized with alkali, sodium hydroxide, potassium hydroxide, sodium carbonate and the like being used. The preparation is made with the addition of distilled water to give a 50% product.

Fat-reducer and Laxative

An excellent ingredient of fat-reducing preparations is said to be laevo-lactate of bile. It has been found by physicians that a safe and harmless product to increase the flow of bile is bile itself. A preparation containing this product aids greatly in digestion, acts as a direct stimulant on the walls of the stomach, makes for a soft stool, and stops the backing up of matter which forms fat cells. Such a preparation can be made up in pills. For the reason that lactate of the bile is one of the natural constituents of the human body, this product contains no drugs. Larger amounts of the same product in pills can be offered as an excellent laxative.

Formulae for Preventing Loss of Hair

Loss of hair, alopecia areata, is prevented or counteracted by a number of preparations, whose formulae, given below, show them to be more medical than cosmetic in nature. Thus one formula uses 10 parts extract of quinine, 10 parts sweet almond oil, 4 parts oil of nutmeg, 10 drops bergamot oil and 50 parts lard. Lard and almond oil are melted together, extract of quinine is added and then essential oils. Quinine bisulfate (1.2 parts) is used in a mixture containing 2.5 parts tannic acid, 2.0 parts balsam peru, 40 parts coconut oil and 10 parts sweet oil of almonds. Oils and balsam are first mixed together and then tannic acid and quinine salt added. In another formula 3 parts epicarin are mixed with 3 parts resorcinol and enough yellow petrolatum added to make 30 parts in all. Three parts chrysarobin are mixed with 1.5 parts balsam peru and enough pure mitin added to make 30 parts in all. Three parts of chrysarobin and enough traumaticin to make 30 parts in all give a liquid preparation. In another mixture 0.5 part of cignolin is mixed with enough benzol to make 50 parts in all. Mercuric chloride (0.1 part) is suggested in making a mixture also containing 10 parts of a mixture of balsamic oleoresins and enough alcohol is added to make 100 parts in all. A liquid preparation, containing both alcohol and water, is made from 0.3 part betanaphthol, 0.2 part salicylic acid, 0.25 parts menthol, 8.0 parts chloral hydrate, 0.1 part pilocarpine hydrochloride, 75 parts alcohol and enough water to make 200 parts in all.

Grip Tablets

It is claimed that the most useful mixture contains 0.15 part acetylsalicylic acid, 0.15 parts phenacetin and 0.15 part salipyrin. Another mixture contains 0.2 part salicylic acid, 0.15 part caffeine, 0.05 part potassium iodide and 0.1 part sodium thiosulfate. Another mixture contains 0.2 part acetylsalicylic acid, 0.05 part caffeine, and 0.05 part ipecac. Quinine salicylate is used in another mixture in proportion of 0.2 part mixed with 0.1 part caffeine, 0.1 part phenacetin and 0.1 part sodium chlorate. Another formula is 0.05 part phenacetin, 0.1 part salipyrin and 0.15 part amidopyrine. Cocoa, sugar and vanillin may be used to improve taste and increase volume of all these preparations.

Casein Ointment

Casein ointment is made from alkali caseinate, glycerin, petrolatum and water. A preservative should be added. Thus 14 parts dry casein are mixed with 0.43 part of a mixture of 4 parts of potassium hydroxide, and one part of sodium hydroxide. Final mixture contains 7 parts glycerin, 21 parts petrolatum, 56.57 parts water and one part preservative as well. Ichthyol may also be added. If this substance is used in making the ointment, the other ingredients must be previously diluted with water since ichthyol thickens the mixture. A casein ointment containing zinc oxide is made from 10 parts of the oxide, 10 parts petrolatum and 80 parts casein ointment. Boric acid may also be used in making the ointment, which then consists of 5 parts boric acid, 5 parts petrolatum and 80 parts casein ointment base.

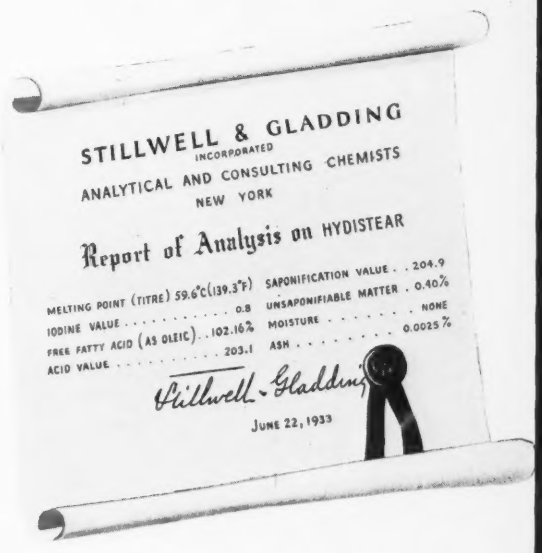
Glycerin Suppositories

One gram of sodium bicarbonate is treated with 33 parts glycerin and heated until most of carbon dioxide has been evolved. Then 3 grams stearin are gradually added with agitation and mixture is heated over small flame with continued agitation, until it becomes homogeneous.

Give *this* Stearic Acid One Test

IN producing Hydistear, we deliberately set out to create the finest possible commercial grade of Stearic Acid. In this, as a glance at the analysis at the right will prove, we have succeeded. In these three important particulars, Hydistear stands alone among Stearic Acids: it is made exclusively from animal fats; it has the high melting point of 139° F; it has an iodine content of only 1.0. Try Hydistear in one of your formulas. Thereafter, we predict, you will adopt Hydistear as your standard. Inquiries are invited.

WILL & BAUMER CANDLE COMPANY, Inc.
17 East 32nd Street, New York


STILLWELL & GLADDING
INCORPORATED
ANALYTICAL AND CONSULTING CHEMISTS
NEW YORK
Report of Analysis on HYDISTEAR
MELTING POINT (TITRE) 59.6°C(139.3°F)
IODINE VALUE 0.8
FREE FATTY ACID (AS OLEIC) . . 102.16%
ACID VALUE 203.1
SAPONIFICATION VALUE . . 204.9
UNSAPONIFIABLE MATTER . 0.40%
MOISTURE . . . . . NONE
ASH 0.0025%
Stillwell-Gladding
JUNE 22, 1933

HYDISTEAR

Hydistear Manufactured by Will & Baumer Exclusively
(PAT. APPLIED FOR)

Other products:
STEARIC ACID (double and triple pressed) • RED OIL • BEESWAX

Cold-Mixed Skin Oils

When these oils are prepared by cooking, the creams and lotions have typical odor of boiled oils. Essential oils, required to hide odor or to produce characteristic perfume, must be added to the cold or lukewarm products. This also applies to color used. These skin oils or massage oils may be made by cold process. Preparation may consist of 100 parts olive oil, 2.8 parts oil of silver fir, 0.2 part lavender oil and 0.18 part oil-soluble chlorophyll. Preparation has fine pine oil odor and green color. Emulsified preparation may also be used for treatment of skin. These preparations penetrate skin more effectively than straight oils. They also have simultaneous cooling action. One formula calls for 470 parts peanut oil, 20 parts egg lecithin, 5 parts oil of Siberian pine, 4 parts oil of bergamot, one part methyl or ethyl parahydroxybenzoate. In another formula there are 490 parts peanut oil and 10 parts essential oils. Also 100 parts peanut oil are allowed to stand over certain quantity of finely comminuted, thin-skinned lemon peel at room temperature. Mixture is frequently agitated. Oil is then poured off after 8 days. Peel is pressed and residual oil filtered. Emulsified oil preparations may also be made from 1.7 gram stearic acid esters, 1.7 parts white oil, 10 parts petrolatum, 5 parts coconut oil, 50 parts water and 15 parts lanolin. Various other emulsifiers may be used.

Vitamin-Containing Skin Creams

So-called vitamin creams contain lanolin and cholesterin or ergosterin, which may be isolated from lanolin, as effective ingredients. Such a product consists of 120 parts beeswax, 20 parts spermaceti, 100 parts stearin, 120 parts anhydrous lanolin, 80 parts coco butter, 360 parts sweet oil of almonds, preserved with methyl parahydroxybenzoate, and 24 parts cholesterin. These ingredients are melted together and after cholesterin has has been dissolved, a hot solution of 3 parts sodium benzoate and 20 parts borax in 340 parts of water are stirred in and mixture further agitated until cream thickens.

Triethanolamine, which is being used in various cosmetics, is used in making another composition of this type. Thus, 1.5 parts cholesterin, 12.5 parts lanolin, 2 parts triethanolamine and 7.5 parts stearin are mixed together. Triethanolamine facilitates formation of good emulsion. Vitamin action of cholesterin may be increased by dispersing same effectively in suitable fat or oil, rather than using it in dissolved state. In another mixture 10 parts stearin, 20 parts lanolin, 20 parts coconut oil, 20 parts beeswax, 200 parts sweet oil of almonds, 6 parts cholesterin, 12 parts lecithin, 80 parts water, 15 parts borax, 1.5 parts sodium benzoate and 0.8 part methyl parahydroxybenzoate are mixed together. Cosmetological action of cholesterin and lecithin is increased by presence of the two substances rather than just one, because cholesterin has stronger action on acid tissue, while lecithin reacts with alkaline tissue. Lecithin therefore softens skin.

Another vitamin skin cream contains about 15. to 2.0% cholesterin and 0.5 to 1.5% of lecithin. Cholesterin and lecithin may be dissolved in waxy or fatty cream bases. Solution of borax in water may also be made and brought up to boiling point and fatty mixture agitated with this solution until it cools off. Quantities used are 30 parts lanolin, 50 parts beeswax, 10 parts spermaceti, 2 parts borax, 18 parts water, 1.5 parts cholesterin and 0.5 parts lecithin. Another formula contains 30 parts lanolin, 30 parts mineral oil, 20 parts beeswax, one part borax, 18 parts water and 2 parts cholesterin.

Zinc Stearate in Cosmetics

Zinc stearate is a very important and advantageous ingredient of cosmetics. Zinc stearate protects skin and provides it with covering which protects it against injurious action of air. It may be used alone or mixed with other powder ingredients. Another important property is that it absorbs any perfume and retains it for a long time. Neither magnesium stearate nor zinc stearate soils skin or clothing. Zinc stearate is also useful as ingredient of salves or creams. For example a cream contains 150 parts glycerin, 100 parts water and 80 parts zinc stearate. The latter is mixed first with glycerin and then water is added gradually. Creams, prepared in this manner, are soft, white and absolutely homogeneous. If it is found that the cream separates after standing, addition of about 5% medicinal soap will be found to be sufficient to make cream permanently stable.

Zinc stearate is also easily worked up with petrolatum. The preparation does not become rancid and is useful as salve for treating skin troubles. The salve may contain 50 parts petrolatum and 5 parts zinc stearate, which is used in place of zinc oxide and gives salve greater healing action. Zinc stearate may also be added to lanolin salves, which are made from 325 parts lanolin, 35 parts ceresin wax, 150 parts mineral oil, 150 parts water and perfume as desired. Salve itself is first made by melting ceresin wax in heated mineral oil and this mixture is added to lanolin and allowed to cool. Then mass is rubbed into white salve, into which water is gradually worked and finally the perfume. About 5 to 10% of zinc stearate is mixed with this base.

Rouge and Powder Compacts

Composition of compact powder differs very little from that of loose powder and rouge compacts simply contain coloring matter in addition to other ingredients. When it is not desirable to use special binding agents, large proportions of starch should be used in compacts. Of course, principal point is that composition of compact should be such that it does not easily break and crumble. An example of formula for compact is 37 parts talc, 25 parts colloidal kaolin, 33 parts starch and 5 parts zinc oxide. Composition contains relatively high proportion of talc and it is essential that high grade talc should be used. Zinc oxide used should not contain any arsenic.

However, in all cases production of compacts is greatly facilitated by incorporation of small quantity of binder, for example about one per cent. of gum tragacanth. Resinous substances in very small quantities may also be added. The dermatologist may object to the presence of gums and resins in face powders, but a small quantity does no harm. When the compact is made by compression the addition of about 10% of a liquid binder is advantageous. Another formula, claimed to give good results, contains 9 parts of zinc oxide, 27 parts of kaolin, 54 parts of talc and 10 parts of a binder. While it is not essential that this formula should not be changed in some of its components, nevertheless considerable care must be taken in making the change so that the final proportions of ingredients are correct. Thus titanium dioxide may be used in the place of zinc oxide but this will necessitate the reduction of the proportion of the zinc oxide substitute and the increase of the proportions of the other ingredients. This must be worked out by trial.

When considerable starch is used in compact powder, it is essential that other lighter constituents should also be added so as to counterbalance the hardening effect of the starch. A compact powder containing titanium dioxide may have the following proportions, 7 or 10 parts of titanium dioxide (97 to 97% pure), 29 or 26 parts of kaolin, 54 parts of talc and 10 parts of binder. Barium sulfate has sometimes been suggested as an ingredient of these powder compacts, but as barium salts are poisonous, barium sulfate is considered not a proper ingredient even though this salt is very insoluble in water. Pure strontium sulfate is useful. The carbonate may also be used as follows:—20 parts of talc, 23 parts of strontium carbonate, 21.5 parts of zinc oxide, 21.0 parts of colloidal kaolin, 7.25 parts of magnesium carbonate and 5.25 parts of calcium carbonate.

In making the rouge compact various coloring matters are used of the type found in ordinary colored face powders. These include various harmless coal tar dyestuffs, phloxin, carmoisin, etc. and lakes when they do not contain barium salts. Carmine is useful though expensive and should be added in solution in strong ammonia. The tints can be toned down

PARENTO

THE STANDARD OF COMPARISON

We firmly believe that our line of compounded floral-odors represents duplications so faithful that they are worthy of use as standards of comparison in selecting a new odor-complex.

Rose Flower A
Lilas du Printemps
Lavender 83133
Locust Buds P508
Jasmin 812
Violet Leaf D
Orange Blossom 3633
Muguet du Printemps

THE ESSENCE OF INDIVIDUALITY

Our research is devoted extensively to the creation of new, distinctive types of odors. Every aromatic oil or chemical available is carefully tested and catalogued. As a result we offer for your approval the "last word" in individual odors.

Orchidee
Jardin de Juin
Fleurette
Idoxa
Brise du Nord
Vagabond

Details on request!

COMPAGNIE PARENTO, Inc.

EXECUTIVE OFFICES AND LABORATORIES
CROTON-ON-HUDSON, N. Y.

NEW YORK
507 FIFTH AVENUE

TORONTO, ONT.
73 ADELAIDE ST., W.

by the addition of the duller colored earths, such as golden ocher, bole, and the like. No more than one per cent of eosin need be used in any case. About 5% of carmine is suitable.

Cucumber Cream

The base of these creams consists of 30 parts of beeswax, 30 parts of spermaceti, and 80 parts of a good grade of benzoinated lard. These ingredients are mixed together and then 0.25 part of borax dissolved in a little water is stirred in. Then 30 parts of grated cucumbers are added. The mixture is stirred continually while cooling, so that the cucumbers do not settle out. After the masceration in the cold, the mixture is remelted carefully and strained through a fine muslin cloth or a hair sieve and again agitated until cold. Perfume should not be added.

Aromatizing Mineral Oil

Acetic acid is useful for acidifying mineral oils, since addition of this acid does not spoil the product in any way. Other organic acids may also be used for same purpose, such as citric, tartaric and lactic acids. The first step in process of mixing acid with mineral oil is to make a saturated solution of the acid in ether. Thus 100 parts of ether will dissolve 1.06 parts of citric acid, acetic acid in all proportions, 0.61 part of tartaric acid and lactic acid in all proportions. Mineral oil is miscible with ether in all proportions. After acid solution is made, mineral oil is added. Mixture is then shaken and ether removed by evaporation on water bath. This process requires considerable care and must be pushed as far as possible to remove greatest part of ether without causing mineral oil to become turbid due to separation of acid. It is also claimed that mineral oil may be mixed directly with formic acid by shaking 1.20 parts of 85% strength formic acid with the mineral oil or 1.21 parts of lactic acid may be used. The mineral oil will acquire a more pleasant sour taste due to this treatment. The shaken oil is allowed to stand, various suspended substances including excess acid falling to bottom and then clear oil is poured off. It is also claimed that slight warming of oil facilitates mixing of the acid with it. Quantity of acid retained by oil is very small, but sufficient to give it a distinctive taste while not having any physiological action, as claimed.

Antineuralgic Tablets

A good formula for an antineuralgic tablet consists of 20 parts codeine hydrochloride, 500 parts phenacetin, 6 parts white gelatin, 51 parts water, 500 parts acetylsalicylic acid, 40 parts talc and 144 parts starch. First, codeine hydrochloride and phenacetin are mixed together. Then this mixture is worked up with hot solution of gelatin in water in mixing or kneading machine. Moist mass is passed through screen and granulated material is dried in boxes in hot air drying oven. After superficial drying has taken place, mass is screened again and then dried at 50° C. until entirely dry. Mass is shaken occasionally during drying process. Acetylsalicylic acid ingredient is first dried in cold air drying chamber and then mixed with dried mixture obtained above. Talc and starch are also mixed in without pressure being applied to form uniform mass. Tablets are obtained from this mixture at average pressure, weighing 0.6 and 1.2 grams each.

Wrinkle Remover

It is claimed that fairly good results can be obtained from a mixture, which contains 500 parts of distilled extract of witch hazel, 20 parts of boric acid, one part of menthol, 50 parts of glycerin, 100 parts of perfume with an ethyl alcohol base and 329 parts of elderflower water.

Skin Salve Bases

Liquid fats are used as softening agents in making bases which are suitable for retaining substances that are to be absorbed into the skin and which allow water to evaporate from the skin at the same time. Such products are for example whale shot oil, lanolin, rump gland fat, bottle-nose whale oil, beeswax, Chinese insect wax, pyslla wax and skin tallow. All these substances have the important property of strongly resisting the action of bacteria. They are not easily oxidized by atmospheric influences and possess only a slight tendency to become rancid. They also hold water very well and in large proportions. The liquid fats may be used alone or in mixtures. Palm wax, curcas wax and synthetic wax products may also be used for the same purpose.

Cleansing Agents For Dentifrices

These consist of sulfocyanides soluble in water provided with a protective coating to make them inactive as far as hygroscopicity is concerned. Coatings used are gum tragacanth, gelatin, albumen, dextrin and the like. Sometimes they are hardened by treatment with tannic acid or formaldehyde. Chalk and other suitable bases are used in making the tooth paste, for example. The addition of carbonates is desirable since carbon dioxide is evolved on reaction with the sulfocyanic acid, producing rapid distribution of the dentifrice in the case of mouth washes and gargles. An example of a dentifrice made with sulfocyanides involves the use of 150 grams of saponin, 225 grams of calcium sulfocyanide and 111.3 grams of saccharin dissolved in one liter of water. The solution is agitated in a mixing machine. Then 12.9 kilograms of anhydrous gypsum are added gradually in small proportions and the mixing is continued until powder is obtained, which is only slightly moist and non-dusting. The mixture is then dried at a temperature of 70 to 80° C. Calcium sulfocyanide is perfectly protected in the powder by the gypsum and the saponin from coming in contact with moisture. Another powder is made from 525 parts of tartaric acid intimately mixed with 900 parts of gum tragacanth. About 100 to 200 parts of ethyl alcohol are added and worked into the mixture until a crumbly, slightly moist mass is obtained, which is then dried at a moderate temperature. The two powders are then mixed together to give the finished dentifrice.

Methyl Salicylate in Bath Preparations

The problem in using methyl salicylate in making bath essences and the like is to obtain the latter in such form that it is readily soluble in water and the methyl salicylate itself in a very fine dispersed emulsion. Turkey red oil, that is sulfonated castor oil, is found to be suitable for this purpose. It is used with the addition of glycerin and potassium carbonate and is obtained thereby in clear solution in water. This solution emulsifies with water without any difficulty. Eucalyptol and menthol may also be used in the place of methyl salicylate or mixed with it in various proportions. An example of a composition is as follows:—150 parts of commercial sulfonated castor oil (95 to 96% concentration), 150 parts of methyl salicylate, 15 parts of eucalyptus oil, 5 parts of menthol, 45 to 50 parts of potassium carbonate, 100 parts of glycerin and 500 parts of water.

Casings for Drugs

Drugs that have to pass through stomach unchanged but which must dissolve readily in juices of intestines are provided with suitable casings. Cellulose esters and ethers have often been thought of in this connection but they are unsuitable in pure state. They are rendered suitable by newly patented process by imbedding particles of a substance more easily attacked by intestinal ferments, in cellulose estes substance. Examples of imbedding materials are fats, oils, waxes, lipoids and bile acids. When added to cellulose ester or ether the latter becomes readily soluble in intestinal ferments. For example the drug mixture may first be mixed with the pill forming substance or filler and then the pills are dipped into solution of 5% nitrocellulose and 5% olive oil in equal parts of an alcohol-ether mixture. A rapidly hardening skin is obtained over the pills. Pills may be coated with thin sugar-gelatin layer and then dipped into solution of 5% cellulose acetate and 5% castor oil in acetone. Capsules may also be made from mixture of 5% nitrocellulose and 5% lecithin dissolved in equal parts of alcohol and ether. Capsules are then filled with drug. They will not dissolve in stomach but will readily dissolve in intestines.

PACKAGING DRUGS AND COSMETICS

A SECTION OF
"THE DRUG AND COSMETIC INDUSTRY"

Know well this industry creative of industries

Chemistry, creator of industries, wide-spreading, deep-penetrating, entering into every phase of all industry, is comprised, fundamentally, of unit operations which produce reactions, results, products. Chemical engineering makes these operations commercially available to reduce manufacturing cost through improved equipment and materials.

Of these, the newest and best can be seen, studied and discussed with producers in one short week at the biennial Exposition of Chemical Industries, this year December 4 to 9 at Grand Central Palace in New York.

Progress in many directions has been phenomenal since the preceding Exposition. To know—come, look, listen and apply.

Remember the place

Remember the date

Management International Exposition Company

For Over One-third of A Century

We have been building Bottling and Packaging Machines and solving

bottling problems for the Nation's outstanding producers of bottled products

Model C
One of the U.S. Acme Accurate Measure Fillers. This type of Accurate Measure Filler is made in various sizes and designs. Designed for use where accuracy in quantity of content must be maintained.

An exclusive product of the U. S. Bottlers Machinery Co., as basic patents are owned by this company covering this principle of filling.

Some products are of such an expensive nature that variation in the containers which hold them present an actual problem, if they are filled to an exact height rather than with an exact amount of product—or legislation may require that the container be filled with an accurate amount of the liquid—or it may be necessary to add an absolutely exact amount of some liquid to each bottle—or it may be desired to heat the product in the filling machine or to keep it hot while filling. The solution of these and many other problems is to be found in the U.S. Acme Accurate Measure Fillers.

U.S. BOTTLERS MACHINERY CO. INC.

INVESTIGATE U. S. EQUIPMENT

Agitators	Filters	Dryers
Belt Conveyors	Pumps	Vacuum Fillers
Cappers	Strainers	Accurate Measure Fillers
Corkers	Washers	Piston Fillers
Cooling Conveyors		Storage Tanks

4015-31 No. Rockwell St. • • • • Chicago. Ill.

WASHING, FILLING and PACKAGING ENGINEERS

SWIFTLY, accurately, economically, through seven years of daily service, this Stokes & Smith Filler has unfailingly served the Philadelphia Wholesale Drug Company. During that period it has carefully put weighed portions of a dozen different drugs into millions of containers—some weighing only one ounce, others up to five pounds.

Always, its uncanny accuracy has been on constant guard against the waste of over-filling. Its sturdy mechanism has never permitted breakdowns or costly repair bills. Today it is bringing the Philadelphia Wholesale Drug Company the same reliable service it delivered the day it was installed.

The record of this machine is typical of the record of hundreds of S & S Fillers in hundreds of different installations. For economy and success, send your filling problems to S & S.

STOKES & SMITH Co

PACKAGING MACHINERY • PAPER BOX MACHINERY
4912 Summerdale Avenue, Philadelphia, Pa.
British Office: 23, Goswell Road, London, E. C. 1

FREE DATA

STOKES & SMITH CO.
4912 Summerdale Avenue, Philadelphia, Pa.

Gentlemen:

Please send me a copy of your new booklet describing the complete line of S & S Packaging Machinery.

Name _____

Company _____

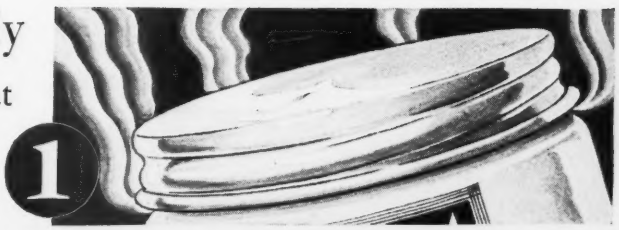
Street and Number _____

City and State _____

P. T. L. ASKED WOMEN ABOUT YOUR SEALING PROBLEMS

NO. 4 OF A SERIES

1570 mg. passed gracefully into thin air . . . in 60 days at room temperature . . . *from number*



Only 40 mg. squeezed their way out

. . . of number

These pictures, at the right, visualize the story the scales told of evaporation losses sustained by a well-known beauty product. Test Jar No. 1, sealed with an old-fashioned 1-Piece Screw Cap lost . . . 1570 milligrams during the 60-day test period. During that time Test Jar No. 2, sealed with an Alseco Rolled-On Seal lost *only 1/39th of that.*

Don't Try to Stop Evaporation by "Seal-Jamming"

These Pictures Tell Why

STRONG GRIP—Even with aid of knives, pliers, openers, etc., women having a strong grip can open only 4 out of every 5 containers that are sealed with old-fashioned 1-Piece Screw-On Caps. But, they can open 100% of all Alseco Rolled-On Seals.

AVERAGE GRIP—Using every method they know and can think of, women with the average grip can open only 3 out of every 5 containers that are sealed with 1-Piece Screw-On Caps. But, they can open 100% of all Alseco Rolled-On Seals.

WEAK GRIP—Using every possible aid they know of, women having a weak grip can open only 2 out of every 5 containers that are sealed with old-fashioned Screw-On Caps. But, they can open 4 out of 5 Alseco Rolled-On Seals.

Sealing is a mighty important question, not only to you . . . *but to women also.* They want your product "full-strength" . . . and they want it under a seal that they can open easily and reclose quickly. The three serial pictures at the left prove that.

Don't add the Hazard of Imperfect Sealing to your Sales Problem

Just how great a sales hazard imperfect sealing is, you'll recognize from the Laboratory Test sheets on four famous beauty products. You'll be interested, too, in P. T. L.'s Consumer-Home and Laboratory Test data*.

If you'll use the coupon, our Market Research Committee will help with your sealing problems. We offer a complete Sealing Service, for all types of products and packing. Automatic and Hand-Operated Machines; Alseco Goldy, Rolled-On, Screw Cap and Specialty Seals.

ALSECO SEALS *and Sealing Machines*

*Consumer-Home and Laboratory Test Data of Pittsburgh Testing Laboratory, as reported in Food Industries, March, April, May, 1933.

ALSECO SEALS TRADE MARK REG. U.S. PAT. OFF.

NRA MEMBER U.S. WE DO OUR PART

Market Research Committee
Aluminum Seal Company, New Kensington, Pa.

I would like to talk with you about Alseco Seals and Sealing Machines.

Name.....

Street and Number.....

Name of Company.....

Position.....

City.....State.....

IT LOOKS EXPENSIVE

BUT IS IT?

THIS handsome box is made of Durez. It contains two vials of Chlorosalsterol tablets, a new and costly medical preparation.

We illustrate it here because a good many people have asked how much such a box costs. It looks expensive. Yet with all engraved insignia, the lustrous colorful, chip-proof surface, the lightness of weight which cuts down shipping-bills, and the permanent toughness of this unusual Durez package, production charges *still* are down to a little more than the cost of an ordinary box.

When you want a quality container that looks the part, that can be produced quickly, and in great numbers, turn to Durez!

Out of Durez are being made containers of every size, shape, and design for manufacturers of limited, exclusive products . . . for producers of ethical drugs . . . for makers of costly perfumes and cosmetics . . . for any business man who wants his product to gain in distinction and prestige!

Durez packages are strong and tough. They resist acids, heat, moisture, perspiration, gases. They are non-fragile, dent-proof. They come in a wide variety of colors. And they catch the wandering eye of the customer and hold it! For facts, figures, samples, and a free copy of the interesting monthly leaflet, *Closure News*, address General Plastics, Inc., 1110 Walck Road, N. Tonawanda, N. Y. Also New York, Chicago, San Francisco, Los Angeles.

• • •

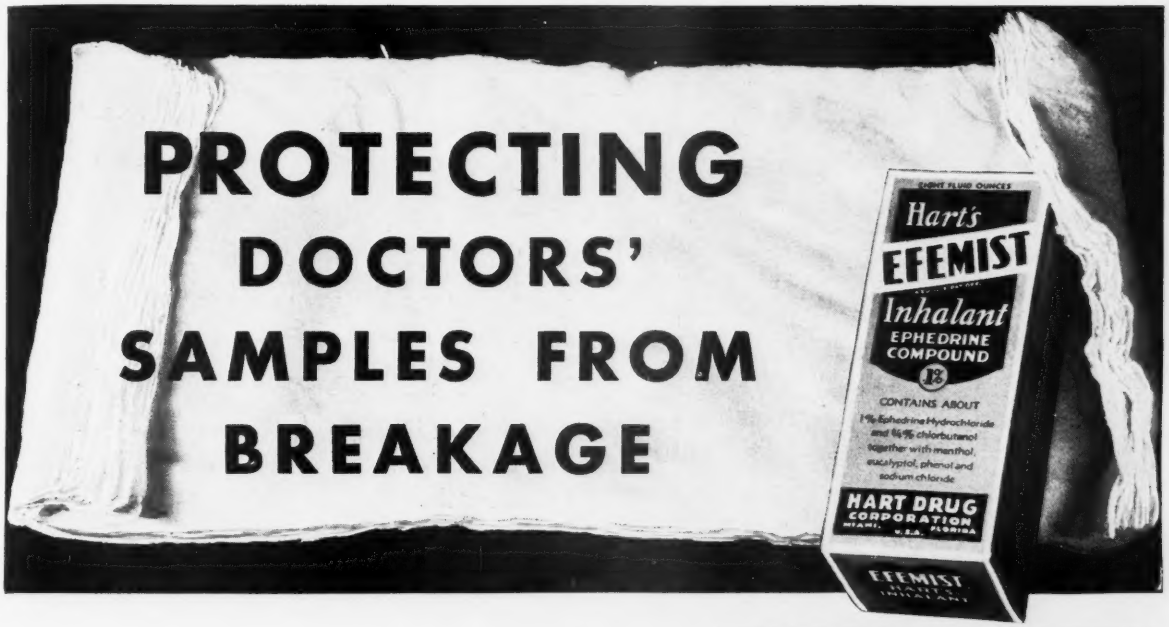
(General Plastics, Inc., does not perform the actual molding operation, but supplies raw material to custom-molders with whom you deal. We will gladly arrange contacts with molders and designers when you so desire.)

DUREZ

REG. U. S. PAT. OFF.

THE MODERN MOLDING MATERIAL

SEE OUR EXHIBIT AT THE CHEMICAL SHOW, NEW YORK, DECEMBER 4 TO 9. BOOTH 71



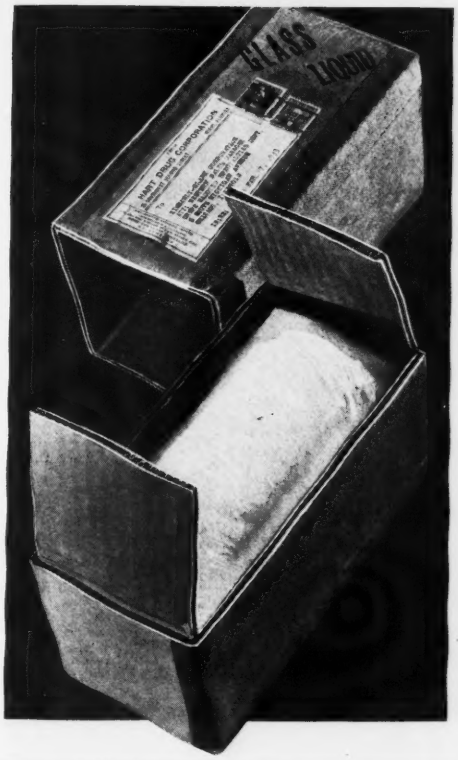
Hart Drug Corporation adopts KIMPAK Crepe Wadding for packing Efemist Inhalant for individual mailing

SENDING individual samples to doctors, special customers, etc., unless properly protected can injure prestige, cause trouble. To avoid this hazard, the Hart Drug Corporation of Miami, Florida, has adopted **KIMPAK** Crepe Wadding for mailing samples of "Efemist" Inhalant to doctors. The carton containing the bottle is wrapped in **KIMPAK** as shown and then placed in a mailing carton.

KIMPAK is admirably suited for this and many other uses. It is a wood fibre product, soft as down, resilient and free from harsh foreign substances. It enhances the appearance of any product.

Besides it absorbs 16 times its weight in moisture. This is especially important where a number of bottles are shipped in the same carton. If one bottle is broken, adjoining containers are protected from danger.

KIMPAK comes in rolls, sheets and pads to fit any need. Mail coupon for samples and prices.



Kimpak

REG. U.S. PAT. OFF. & FOREIGN COUNTRIES

CREPE WADDING

DCI-10

KIMBERLY-CLARK CORP., Neenah, Wis.
Address nearest sales office:
8 South Michigan Avenue, Chicago; 122 E. 42nd Street, New York City; 510 West Sixth Street, Los Angeles.
Please send us sample and full information on KIMPAK.

Company_____

Address_____

Attention of_____

Our Product is_____

The New Dispensing Bottle

THE IDEAL, NEW DISPENSING BOTTLE FOR BULK PERFUME

Here is the ideal bottle to be used for dispensing perfumes. The illustration on the left shows our new No. 337 eight ounce bottle.

Beautifully designed, clear, brilliant glass, with graceful floral design cut in the glass, we can offer this number in sizes from one dram to sixteen ounces for sampling, lotions and other toilet preparations.

Also the popular, gem like bottle which gives every effect of cut glass. Furnished with moulded caps or glass stoppers in a variety of designs and effects.

In one dram bottles, perfect for dispensing perfumes.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD.

NEW YORK OFFICE: 500 FIFTH AVE., Room 1427
Telephone: CHickering 4-0592

CHICAGO OFFICE: 1502 MERCHANDISE MART
Telephone: WHitehall 4326

RADICAL PACKAGE DESIGN

The potentialities inherent in packaging materials has not been fully appreciated in creating distinguished packages.

From the beginning of interest in packaging it has been stated and re-stated that the aim of package design is to secure *individuality for your package. All the resources of* art, color, line, and mechanical ingenuity have been drawn upon to create distinctive packages. But did you ever stop to consider what will happen when all packages are beautiful? How will your packages stand *out then?*

Serious questions these, because we shall then have a uniformity of beauty just as we had a uniformity of ugliness a few years back. Packaging art draws its force from contrast. Put one beautiful package among *several ugly ones and the beautiful package inevitably* draws the eye. Put an ugly package among many beautiful packages and the ugly one draws the eye. It is out of step; it *contrasts.* But when *all* the packages are either uniformly ugly or uniformly beautiful, then *no one member of the group stands out. Hence,* package design.

Now this uniformity of beauty is coming to pass very rapidly, especially in the field of cosmetics. No longer can a merely beautiful package monopolize attention *in this field. There are already so many lovely cos*metic packages in the stores that it is extremely difficult to remember clearly any one individual package. All that you carry away is a blurred impression of multi-colored, jewel-like packages. Thus, one of the basic aims of packaging is becoming nullified.

The situation is even more acute than this, particularly in drug stores where a vast amount of heterogeneous, packaged merchandise is displayed cheek by jowl on open display stands or on crowded counters and shelves—and in a relatively small area. The result is *that your package must compete for attention, not* only with its natural rivals but with all other packaged merchandise. With pharmaceutical packaging picking up speed—some of it, indeed, having already surpassed cosmetic packaging—beauty in packaging is rapidly *losing force. We are obliged to find another dimension* in package design.

And this dimension is inherent in the materials themselves.

When all the resources of artistry, color, line, form, *no longer suffice to secure that distinction without* which no package fulfills its merchandising function, then we must look for other means of making our packages unique. And happily a start has been made. Some packages went radical some years ago even *before the sales value of a change in packaging materials* was fully appreciated.

(*Continued on page 370*)

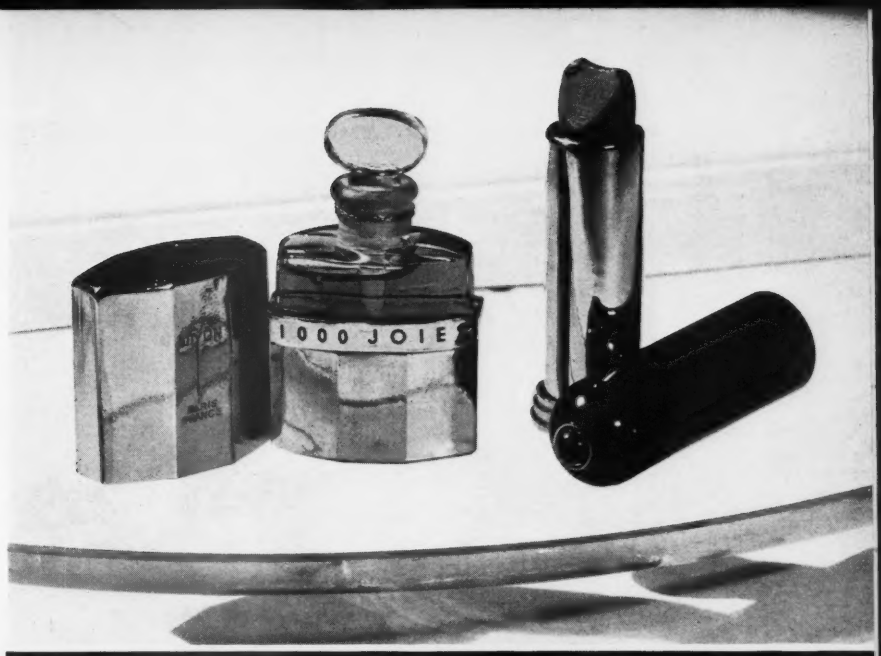
Two of the distinctive containers of Yardley are the wicker enclosure surrounding the bottle, and wooden shaving bowl which Yardley has so long sponsored. These innovations give a distinctive touch to these products.

Barbara Gould is offering four new odors—Ten, Twenty-five, Thirty, and Forty. Numbers correspond to four different states of beauty. Ten, fresh young odor; Twenty-five, slightly more sophisticated; and so on. Boxes are colored in cream with red trim.

Coco-nesia is a milk of magnesia in tablet form flavored with chocolate, each tablet being equal to two teaspoonfuls of liquid milk of magnesia. These are packed 20 tablets to a box and are offered by E. Fougera & Co. Box is a flat tin one in brown and white.

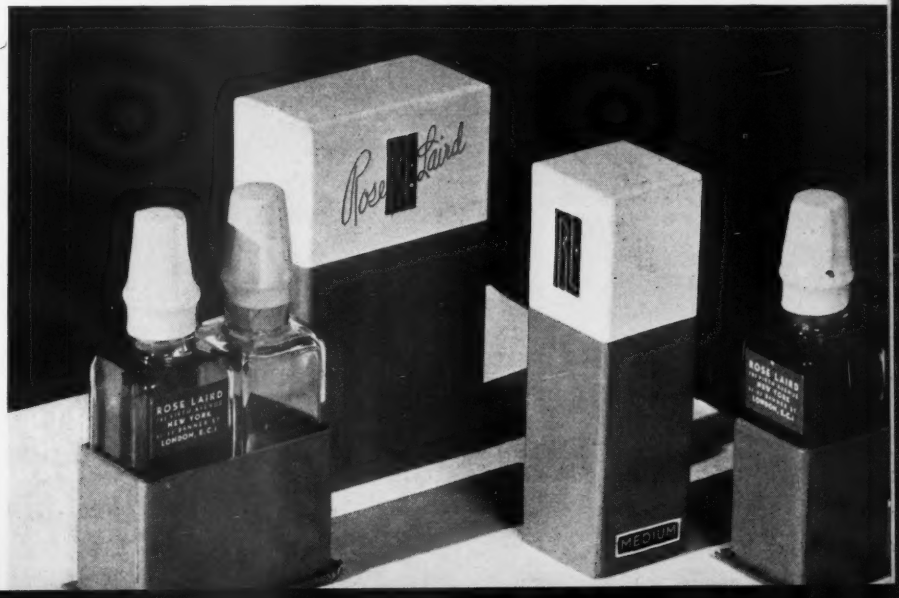
Charles of the Ritz has a charming container of rich wine and silver for nail polish. The container is simple and attractive with a uniquely designed and constructed sliding, reversible cover. Two views of the cover are shown in the accompanying picture.

New Myon numbers are lipstick and purse container, lipstick coming in three shades—Soires in black jewel case; matinee with red jewel; Fonce with green jewel. Perfumes 1000 Joies, Three Passions, Coeur de Femme are packaged as shown in illustration.



Ruth Rogers Avacado Tissue Cream and Cleansing Cream introduce still another cosmetic raw material—the alligator pear. These new creams are said to be made with the use of alligator pears, giving them unique and desirable properties. Caps are in green and gold.

Rose Laird's new nail polish is available in twelve shades—colorless, light, coral, rose, medium, ruby, and a variety of the extra dark shades so popular nowadays. They may be obtained in combination with the remover or without it, as is illustrated.



Glass containers suitable for cosmetics and other products, with appropriate silhouette designs applied directly on the glass and incorporated into it in process of manufacture are offered by Owens-Illinois Glass Co. for special offerings for the approaching holidays.

Hinds Cleansing Cream, Texture Cream and Toning Cleanser have been repackaged to match the new Hinds Honey and Almond package. These were packaged in colors of maroon and silver. Now they appear in the combination of peach, black and rose.

Elizabeth Arden is offering many gift sets for coming Christmas holiday season. The one shown contains a compact and lipstick of an enameled design. Many others are available with more items at higher prices. All shades can be had in powder or stick.

Clover Farm Stores Corporation has introduced a line of cosmetics packaged in attractive containers of modern design. These products bear the name, Sally Clover, on an embossed and debossed metal label. Closures are of plastic material. Appearance is striking.

PACKAGING NOTES

POND'S JARS

In 1910 or thereabouts, Pond's adopted a heavily-shouldered, thickly-paneled opal jar as the standard container for their creams. In the intervening years, many packages have been changed, particularly in this highly package-conscious industry, but Pond's remained adamant. Slight changes were made in the label but the style and appearance of the package remained, to all intents and purposes, unchanged.

Now Pond's has adopted a new jar. As befits an old, established, reliable house there is nothing extreme in the newness of the package. The greatest departure has been made in the shape of the jar, which, in cross-section, is oval, rather than round—believed by Pond's to be unprecedented in cream jars. The old, heavy ridges, top and bottom, have, of course, gone and the package has taken on a new shorter, broader, more clean-cut outline, somewhat modern in effect. The inner surface remains round.

The label, also, has been cleaned up and a newer style of letter adopted but, on the whole, it remains an honest, rather plain-looking label, which is exactly what the company wants. The closure is a green metal cap with Pond's spelled out on the top, replacing the silvery cap with the old-style monogram. Green caps because the Skin Freshener and Tissues, both fairly recent additions to the line, are in green and white.

Test campaigns conducted in two cities by J. Walter Thompson proved that the change had been a good one, that salespeople and customers chose the new jar in preference to the old, that new customers were being made. The package was more pleasing to women, contributed a more attractive tone to the top of the dressing table.

Pond's is not exchanging new jars for old, but will make no public announcement before December 1.

THANKS to SQUIBB

Sooner or later somebody was bound to take the old hinge-cover, nail-breaking, pill-spilling, profanity-invoking, flat tablet tin and do something about it besides throwing it down and stamping on it.

One might even have looked towards the can companies with a certain amount of expectancy and hope. After all, they are interested in increasing the number of products packed in tin; they are interested in developing new, smart, convenient, tin packages; or aren't they?

At any rate, it remained for Squibb to turn out the most-commented-upon, most-universally-praised package of the year, if not of all time. The new aspirin tin and its inner workings were illustrated in these pages last month, but it would take many, many more of these pages to chronicle all the hosannahs which are now rising from highway and byway as the consumer becomes acquainted with the new convenience of this slide-cover tin.

Thanks to Squibb, it is now possible for the headache-sufferer to reach for an aspirin tablet without running the risk of a stroke or, at the very least, a much more severe headache, as the fingernail breaks and the pills go bouncing merrily all over the floor.

You don't have to be package-conscious to appreciate that package.

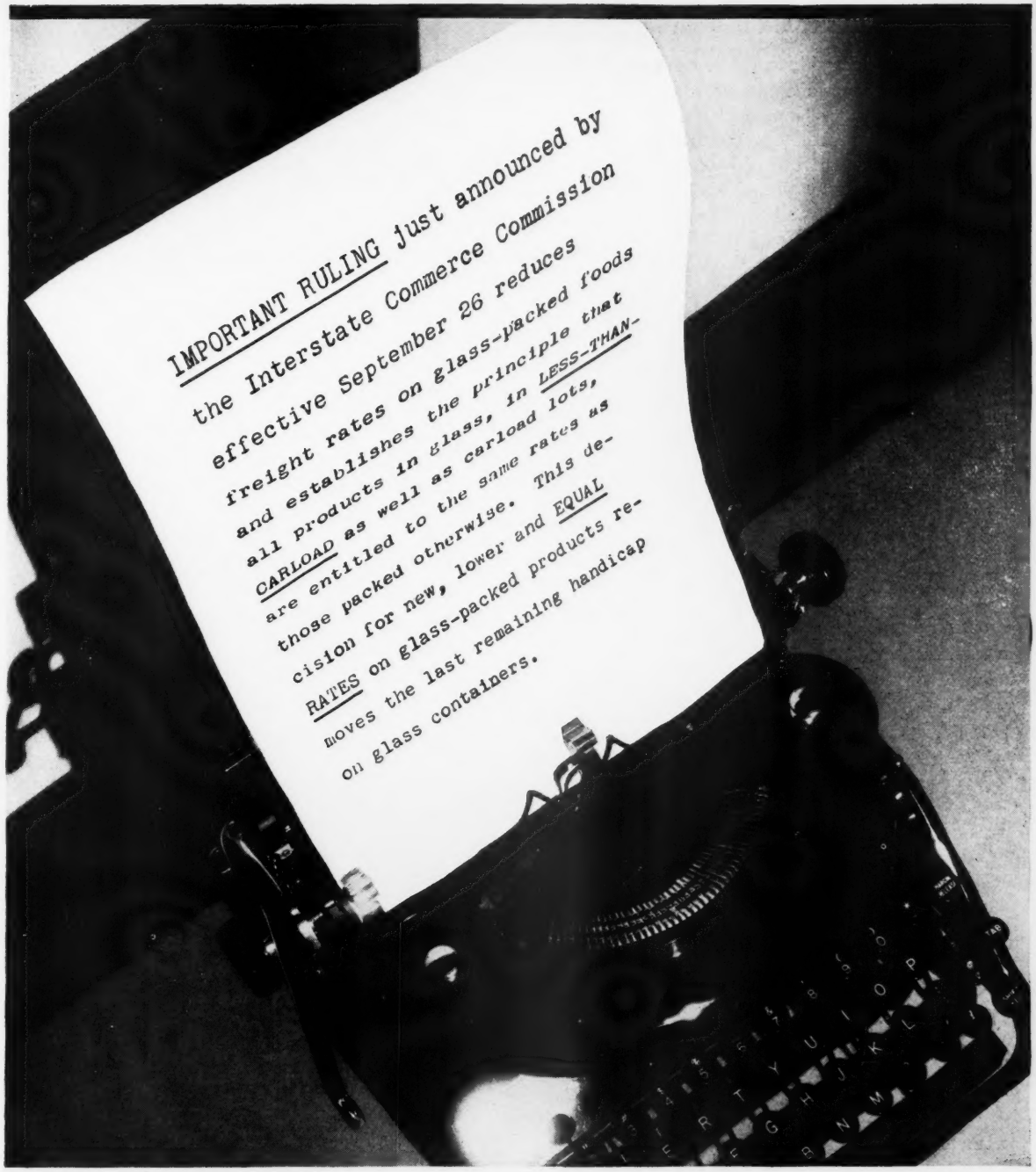
PHOTOGRAPHIC PACKAGING

Currently there appears to be a renewed interest in photographic packaging. The advocates, and there are many, of photography applied to packaging point out that, while it is important to retain the decorative appeal, it is essential to add specific information that will focus attention upon the particular merchandise. Photography, of course, fulfills both of these requirements.

The drug or cosmetic manufacturer who first makes use of this dramatic medium on his package seems assured of widespread public interest, with its resultant sales advantages. Although the photograph can be used effectively in any one of three ways: i. e. a photograph of the merchandise itself; a photograph showing a special aspect of the merchandise; a photograph showing the use of the merchandise; this industry will doubtless concentrate upon the last-mentioned application.

So many of the products in this field are manifold in purpose. To take the first which comes to mind, most of our liquid antiseptics are intended for mouthwashes, gargles, dandruff remedies, body rubs, etc. Each carton might show a different use or perhaps an entire series of uses might be depicted upon the same carton or label. And with the advances in colored photography, black and white need not be the only colors, although those two alone are highly effective.

So far as this department is concerned, it promises to lead the parade to the nearest drug store when the first liquid antiseptic package appears featuring a photograph of a gargler by Anton Bruehl.


IMPORTANT RULING just announced by
the Interstate Commerce Commission
effective September 26 reduces
freight rates on glass-packed foods
and establishes the principle that
all products in glass, in LESS-THAN-
CARLOAD as well as carload lots,
are entitled to the same rates as
those packed otherwise. This de-
cision for new, lower and EQUAL
RATES on glass-packed products re-
moves the last remaining handicap
on glass containers.

WITH glass packed products now enjoying full equality in freight rates, their superior sales advantages loom larger than ever.

To manufacturers and packers contemplating a switch to glass for their products—or for additional items—Anchor offers the facilities of its organization; a trained staff of sealing experts, a research department experienced in glass packing problems for over a quarter of a century, and a line of closures unequalled in the industry, one designed to meet every conceivable condition of product protection, package appearance and production economy.

Anchor Cap & Closure Corporation

Long Isla id City, N. Y. **Toronto, Canada**

Branches in all Principal Cities

WALGREEN'S SURVEY

Reports from Chicago indicate that Walgreen is doing something in the way of a packaging survey through its store at the Century of Progress. Taking advantage of the diverse and probably representative character of those visiting the exposition, Walgreen is finding out many things about what people buy and why, whenever they enter a retail drug store.

The findings thus far are incomplete, but Walgreen is reported to have established, rather definitely, that other things being equal, packaging has seemed to play an especially notable part in determining sales. That is, among comparable products the items in new and modern dress have pretty regularly been outselling those not so new and modern. Whether or not the modernism of the Fair has had any influence on the buying habits of the visitors is, of course, an unknown factor. At any rate, Walgreen should have plenty of interest for drug and cosmetic manufacturers by the time the Fair is over, particularly as regards packaging in relation to sales.

Incidently Walgreen is easily in the van of chain store people when it comes to packaging. They have broken completely with the old type drug package, modernized the shapes and styles of containers, and adopted front labels featuring decorativeness and visibility. And when the line in question is a household line—why not?

HONEY & ALMOND GAL

In April 1929, our pages featured a story entitled, "Two and One-Half Years to Change a Package." Therein was described the whys and wherefores of Hinds' package change with play-by-play pictures of each of the six steps in the process.

The chief effect of the finished package was a smaller "Honey and Almond Gal."

Now, overnight, a little over four years later, she has vanished completely. True, a bear suggestion—a shadow of her former self—appears on the carton, but she has disappeared from the bottle.

The new package appears rather severe and formal when seen in black and white viz., our page last month, but the gay colors counteract this, when the package is seen in person. HINDS' CREAM was the focal *point on the label even in 1872, today it stands practically* alone on the front of the smart, ultra-modern package.

RITZ BOX

Something a bit different in a set-up box has been achieved by Charles of the Ritz in a new package for *nail polish. Of chief interest is the unique design and* construction of the sliding, reversible cover—though the package yields to none in point of good looks.

GETTING DISPLAY

A new solution for the display problem of the small package is offered by Egmont Arens in the package designed for "Beslin Iodine Compound." To the back of each bottle is fastened a display card, slightly higher and about three times the width of the bottle. Thus one bottle, standing up, makes a very effective display, but when any number of them is grouped on a counter or showcase, the result is quite overwhelming. Once purchased, card and bottle are easily separated thanks to perforations which separate the area fastened to the bottle from the rest of the card.

BABY'S BOTTLES

From time immemorial (meaning anything over ten years) bottles have been wrapped in corrugated paper. It remained for Pyrex to think of *colored* corrugated paper and blossom forth with pink and baby-blue wrappings on their nursing bottles. Sales have mounted satisfactorily.

ORCHID DRUMS?

Speaking of new packaging materials, as who isn't, the promise that steel will soon be rolled out in brilliant, unfading colors instills the faint hope that alcohol will soon be shipped in powder-blue, cod-liver oil in canary-yellow, and glycerine in orchid drums. Then a warehouse will be a thing of beauty, a joy forever, and a good place to go to get away from it all.

TUBES FOR SHAMPOOS

Shampoos are beginning to appear packaged in tubes. This is obviously a sensible move obviating, as it does, the need for keeping a death-like grip, and a very soapy grip to boot, on a bottle in the shower or bath.

GARGANTUAN LABELS

The ordinary household items like cod liver oil, mineral oil, witch hazel, rubbing alcohol, etc., appear in larger and larger bottles. Seemingly as a matter of course, the size of the labels increases with the size of the bottle until many of them approach billboards in proportions and two-volume novels in reading matter. As these enormous labels seem neither decorative nor necessary, why not adopt a smaller label, advantageously placed?

1-HAND LIPSTICKS

Well the one-hand lipstick has now reached the ten-cent store—although priced at 30 cents—and the poor shopgirl may once more hold up her head among her more fortunate sisters. Its no work of art and no triumph of technique but it *does* work with one hand.

THE KEY TO INCREASED SALES!

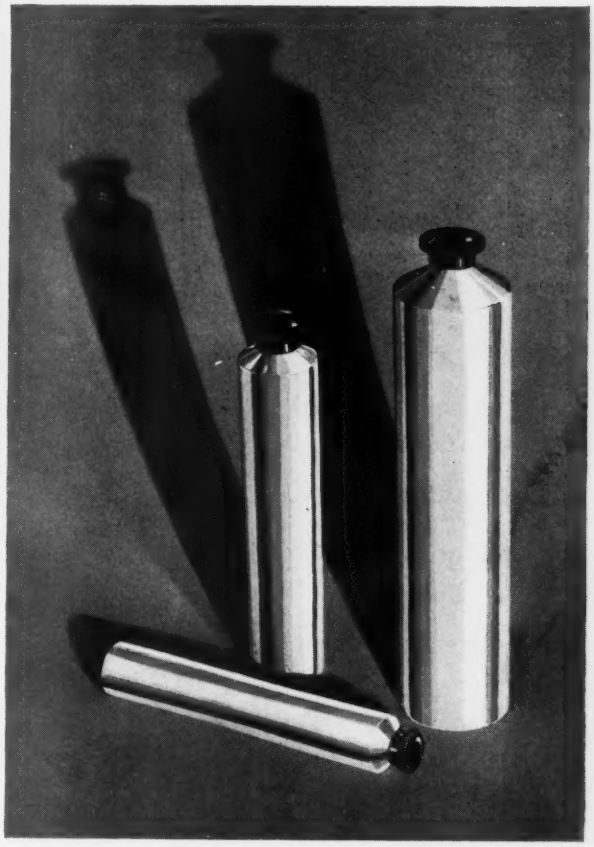
HART containers . . . . of sparkling, Crystal Clear glass can do more to give your product a quality look than trick designs and fantastic shapes. Quality exerts a powerful influence on sales, and Hart quality bottles and jars cost no more than ordinary glass containers. Write for samples and prices. See for yourself how little real quality can cost you.

HART GLASS MFG. COMPANY
504 E. Center St. • Dunkirk, Ind.

● CRYSTAL CLEAR
BEAUTY IN EVERY JAR

HART
BOTTLES & JARS

CHARACTER . . . IN TUBES



WE offer you complete service in the creating and designing of decorated collapsible tubes.

We will also gladly assist you in determining upon the best sizes and styles of tubes for merchandising your product—the most appropriate closure or cap—and any other factors involved in the use of tubes as containers.

NATIONAL COLLAPSIBLE TUBE COMPANY
Providence - - Rhode Island

New York Office—341 Madison Avenue
Telephone MUrray Hill 2-1626

A cream rouge in two shades, Cherry and Natural, is the latest addition to the Yardley line. The cream is of a light fluffy type, indelible and lasting. The glass pots are miniature replicas of the Yardley complexion cream jars in black plastic. They appear very neat.

De toi je chante (in English, "Of Thee I Sing") is a new perfume offered by Charbert, Inc. The odor is offered in purse to 8 oz. sizes. The odor was created by Madeleine Cameron, wife of William Gaxton, star of the production "Of Thee I Sing." Interesting history!

Novopin, said to be the oldest pine bath preparation, is now being made in this country by the Novopin Pharmaceutical Company. The product is made in several forms to suit the desire of the user. Large advertising campaign is planned throughout the nation.

Our part of the job

Every step in the manufacture of Resinox is toward one goal: *to produce a molding material* whose quality and uniformity are unexcelled. You can expect consistently *good work with* material like this.

Keep in Touch with Resinox Developments

Specify

RESINOX

Molding Resins Molding Compounds Laminating Varnishes

RESINOX CORPORATION

Subsidiary of Commercial Solvents Corporation and Corn Products Refining Company

230 Park Avenue, New York City

CARTONS

. . . but there IS a difference!

. . . a difference in materials
. . . a difference in workmanship
. . . a difference in price

all of which make CROSBY CARTONS ideal packages for introducing your products to the consumer. Cartons by CROSBY encourage initial sales.

CROSBY CARTON COMPANY INC.

743 E. Sixth St. Boston, Mass.

Pro-Ker Laboratories has introduced a new Pro-ker Hair Milk, developed by Charles Nessler, as a guaranteed treatment against baldness. Two sizes are shown with the front of one and the back of the other. An instruction booklet is enclosed in the cellulose.

Potter & Moore's latest addition to their Mitcham line is a bath salt in liquid form. This is not an oil, nor does it contain alcohol; it scents the water but does not discolor it. It is packaged in two size flasks with the typical Potter & Moore label design.

. . . a Winner!

THERE were twelve cakes of fine Laco Soap that had to be "put over" to the consumer.

A thorough analysis resulted in perfecting this combination package and counter display . . . simplicity in arrangement plus vivid, contrasting colors, which brought desired sales.

Why not put it up to "HATCH of LOWELL" who are *sticklers* for doing the *unusual!*

The C. F. HATCH Company
LOWELL, MASSACHUSETTS, U. S. A.

RIEGELINE

FOR

TRANSPARENCY

WITHOUT EXPENSE

Riegeline is a newly developed product, combining the economy of ordinary glassine with the transparency of more expensive wraps. It twists well, works rapidly on any wrapping machine, and will not expand in wet weather or shrink to the splitting stage in dry weather.

LIBERAL SAMPLES AND PRICES PROMPTLY FURNISHED

RIEGEL PAPER CORP.
342 Madison Avenue · New York

CORKS
that
Please
ARCO corks are made only from carefully selected Portuguese and Spanish corkwood by skilled artisans using the most up-to-date machinery.
Having formerly owned the old J. H. Paddock Company and the Atlantic Cork Co., Inc., we are confident of our ability to supply you with corks of a higher type.
Clean, velvety, flexible ARCO corks cost you no more. Give us an opportunity to quote, then try our combination of price, quality and service.
ARCO CROWN CORK & CAP CO., Inc.
Factory:
3903-5 Second Ave., Brooklyn, N. Y.
Sales Offices:
21 Spruce St., New York, N. Y.
Manufacturers of Corks and Cork Specialties

Display for the small package has been well handled by Egmont Arens in his design for Beslin Iodine Compound. Display card is fastened to one corner of bottle, and when the bottles are standing on counter, showing is very effective. Card is easily removed.

Norwich Pharmacal Company has entered the market for cod liver oil concentrate tablets with the package shown below. The attractive bottle contains 100 tablets of high potency. Carton is of the same design as the label of the bottle in Norwich style.

Iokelp is a product containing elements described in its name—iodine in its natural state. The product is made up in tablets and is widely used in some sections of the country. Container is ethical in appearance, but quite distinctive and cellulose wrapped.

Norwich
Cod Liver Oil
Concentrate
Tablets
100
Norwich
COATED
Cod Liver Oil
Concentrate
Tablets
A pleasant palatable tablet of Cod Liver Oil concentrates. Vitamin Tested to contain not less than 1000 Vitamin A units and not less than 500 Vitamin D units. Each tablet is equivalent to ½ teaspoonful Cod Liver Oil.
DOSE: Adults, 3 to 5 tablets daily. Children, 2 to 4 tablets. These tablets are pleasant to the taste and can be crushed and chewed, or if preferred, simply swallowed
Price $1.00
The NORWICH PHARMACAL COMPANY
NORWICH, NEW YORK

PACK-URGES*

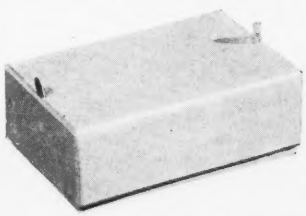
by "Duff" Gordon

"CAPLESS TUBE" PROVEN SUCCESS AFTER A YEAR'S TRIAL!

Just a little over a year ago Pack-Urges featured a "Capless" tube, suggesting it as the ideal container for tooth pastes, creams, and pastes—by virtue of its eliminating for all time the "lost" tube cap problem—or the costly item of leakage on shipments for foreign climes. Much publicity resulted—and a tooth paste that adopted the new closure reported "success" from the outset.—Now—more than a year later—we have tubes which were filled and numbered for later tests—others in use for twelve months—and these samples prove beyond question that the "Capless" tube overcomes many bothersome questions; is economical to manufacture, as it eliminates cap costs; lives up to its guarantee of automatic closure after each time it is used; and gives manufacturers of tooth paste, shaving cream or what have you, an additional advertisable feature for their products. We are predicting a continued success for the "Capless" tube and will send you samples to prove our point. Write us now for costs and proofs of our statements as to its success.

• • •

MAILERS FOR EVERY PURPOSE



The mailing box illustrated here is just one style of the wide range of "Gordon" Mailers, suitable for every type of sampling campaign . . . Some are corrugated lined—others have sealed flaps—all are approved by the United States Postal Service . . . Show us what you want to mail and we'll build a box around it that will deliver your product in perfect condition . . . Prices are moderate . . . Workmanship unexcelled . . . A call will bring you full particulars.

• • •

PERFUME AND POWDER BOXES

Every perfumer knows that boxes for Perfumes, Cosmetics and Toilet Preparations should have a note of individuality *built into the box.* Style trends and interior decorative preferences are but two of the many phases which we keep in mind when making boxes for the cosmetic trade . . . The only set-up box included in the best All American Twelve Packages was handled in detail by us (designed by Mrs. Avery Robinson)—just another example of our ability to interpret your ideas in definite salable boxes. Call us in on your next box purchase . . . We'll serve you right—and save you money.

"Pack-Urges" is issued occasionally in the interests of better packages. If you wish to receive it regularly it will be sent free upon request. Address: H. R. M. Gordon —A Complete Packaging Service—341 Madison Ave. (Phone Murray Hill 2-1626) New York.

*Copyright and trade-mark applied for

BOTTLES • JARS • CAPS and KAPTITE

Modernistic bottles, opaque and clear, colorless, white, or any pastel tint.

Aluminum bottles for essential oils.

Kaptite, an alcohol and acid proof sealing preparation.

, Cream, ointment and rouge containers

HAGERTY BROS. & CO.
10 PLATT ST., NEW YORK CITY

"FILMA-SEAL"

(the double seal of cap and film)

We now announce Type J **"FILMA-SEAL"** (patented 1933). Millions of **"FILMA-SEALS"** are used by nationally known concerns on a great variety of products in combination with our C. T. screw caps.

Type "J" is a complete guard against Counterfeiting, requiring that the FILM be torn off and destroyed to get access to the contents. It is also the tightest seal of its kind, preventing leakage and evaporation.

Economical in cost—Automatically applied.

Write for samples of Type J **"FILMA-SEAL."**

FERDINAND GUTMANN & CO.
Established 1890
BROOKLYN, N. Y.

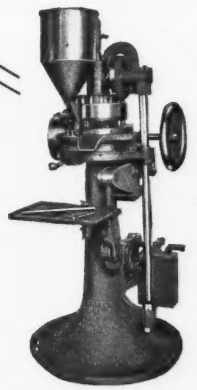
U. S. Patent and Patents Pending *Trade Marks Reg.*

Bouton Jasmin is packaged in a decidedly attractive bottle of a skyscraper design. This bottle is contained in a box of red imitation leather, with a red plush lining. The name on the box is printed in gold, and the decorations on the box top are in gold.

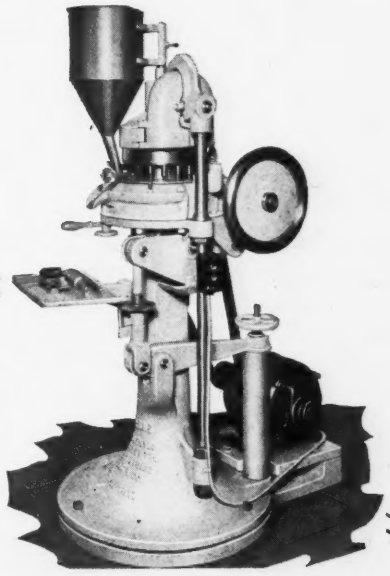
Pond's have adopted new jars for all creams. The package has taken on a shorter, broader, more clean-cut outline, somewhat modern in effect. New jar has been adopted for all sizes, and one new small size has been added for ten cent stores in both types of cream.

1930

New Machines! New Economies!



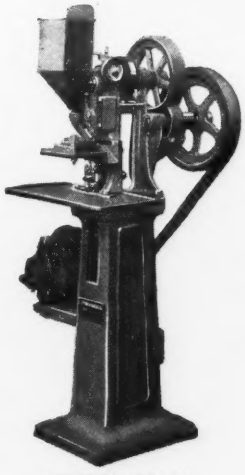
"B" Rotary
Tablet Machine



"RB-2" Rotary
Tablet Machine

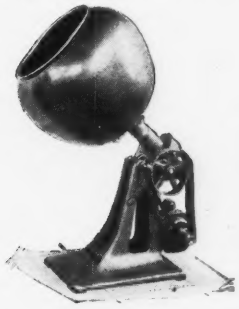
Punch guards—improved die table—easily adjusted feed frame—anti-capping device—spring-controlled excess pressure release—other improvements—speed 400-500 per minute.

1933



"E" Tablet Machine

(Below) New Coating Pan with improved stand.

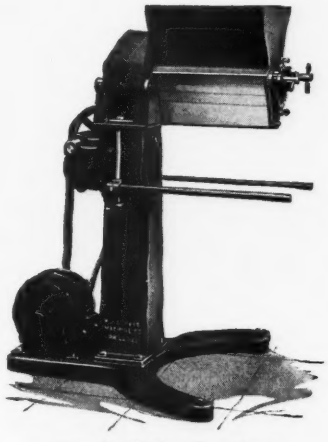


DURING the past three years we have intensified the effort to improve our complete line. Tablet machines, tube fillers, powder fillers, water stills, etc., etc., have been redesigned to embody new features that will make them serve you better.

Catalogs are available on all these new machines ---hand operated to full automatic models.

Write for literature today

See our Exhibit at the Chemical Show, Booth 80



New Oscillating Granulator

FJS **FJSTOKES MACHINE COMPANY**
Pharmaceutical Equipment since 1895
5932 TABOR ROAD OLNEY P. O. PHILADELPHIA, PA.

NRA WE DO OUR PART

Management Forum

By Francis Chilson
Production Engineer

Causes of Separation

We are very much impressed by the paucity of knowledge in regard to emulsions. Many manufacturers are completely at sea when a preparation separates. The causes of separation are not so numerous, and some of them of course are due to physical reactions about which little is known. Among the causes we have encountered in our own experience are:

Decomposition: This usually occurs when mucilages, albumen and animal products are used as emulsifying agents, and is due to the lack or an insufficiency of preservative.

Incompatibility: This occurs when the emulsion contains an ingredient which is incompatible with the emuslifying agent and causes it to precipitate. Borax in an emulsion containing gum acacia; mineral acids in emulsions containing albumen, etc. Another very common instance of incompatibility occurs in connection with an attempt to make an acid emulsion with a soap emulsifying agent.

Insufficient dispersion: This is due to failure to reduce the oil globules to a very minute state. It is a deficiency caused by lack of adequate equipment. There are any number of emulsions that will separate on standing when mixed in the ordinary way but will stand up indefinitely when mixed rapidly, as for instance in a colloid mill or homogenizer.

Excessive dispersion: This is the reverse of the foregoing and is due to such fine dispersion that the properties of the emulsifying agent are destroyed. This condition frequently occurs in connection with preparations containing vegetable mucilages.

Electrolytes: The presence of salts especially those of calcium, magnesium, aluminum, copper, iron, zinc, bismuth mercury, etc. are likely to destroy emulsions, but in some instances very small quantities can be added *after* the emulsion has first been formed.

Temperature: Numerous emulsions will break if exposed to low temperatures; others will break if exposed to high temperatures. Emulsions containing soap are likely to be sensitive to cold; those containing animal products are likely to be sensitive to heat. Sometimes a temperature variation of twenty degrees one way or another will cause separation, as for instance, when emulsions are heated by attrition in going through a colloid mill, or by pressure in a homogenizer.

Insufficient viscosity: Many emulsions will separate if not sufficiently viscous. This can be remedied by the addition of an emulsifying agent that will bring the viscosity up.

Improper procedure: Some emulsions must be handled slowly; others must be handled rapidly. Some will require the making of a *primary* emulsion first which can be diluted after emulsification has been effected. Chemicals like phosphorus, sulphur, camphor, creosote etc. cannot be added to the batch directly but if first dissolved in a fixed oil can be emulsified very readily.

Failure to distinguish types: Attempts to add water to water-in-oil type emulsions or oil to oil-in-water types will cause separation. Many manufacturers fail to distinguish between these two emulsion types. They assume that because the emulsion contains more oil than water they can add more oil to it, whereas an emulsion can consist of ninety per cent. oil and ten per cent. water and still be an oil-in-water emulsion.

Improper emulsifying agent: No one emulsifying agent is suitable for all emulsions. The manufacturer should know what emulsifying agents are best for his particular emulsion. Often a stable emulsion can be secured by changing its type, that is from an oil-in-water to a water-in-oil, an effect which can be secured by changing the emulsifying agent. Some materials are better emulsifying agents than others.

Filtering

There appears to be more inertia and ignorance in regard to filtration than any other manufacturing problem. The invariable rule is that a plant making several kinds of products will have "standardized" on one type of filter paper or sheet. This is wrong. Although you can standardize your filtering equipment, you cannot standardize your filter paper because there is no such thing as a universal filter paper. What is suited to one product may not be suitable for another. But so long as a clear filtrate is obtained most production men overlook the *rate of speed at which that filtrate flows.* Using the same paper for two products you may get a flow rate of twenty gallons a minute on one and only six on the other. Although the filtrate is equally clear and brilliant in both cases it is obvious that the cost of filtering one product is three times as great as the other. Unfortunately the data on filtering has never been collected and set down in concrete fashion for the reason that there are so many variables affecting this process such as viscosity, temperature, percentage and nature of foreign matter, type of equipment employed and the amount of pressure exerted by it, area of filtering surface, etc. etc.

This would make an interesting and valuable thesis for a research worker who should find it possible to classify liquids by viscosity and by the nature and amount of foreign matter, so that a production man, even though lacking in general experience, could judge the efficiency of his own methods. It will pay those who investigate the matter to experiment with different types of paper, cloth and filter aids. You will find that a certain type of paper gives best and quickest results for one product; asbestos cloth for another; and possibly felt and some filter aid such as diatomaceous earth for still another. We'd like to hear from anyone who has played around with filtering; his views would be most welcome.

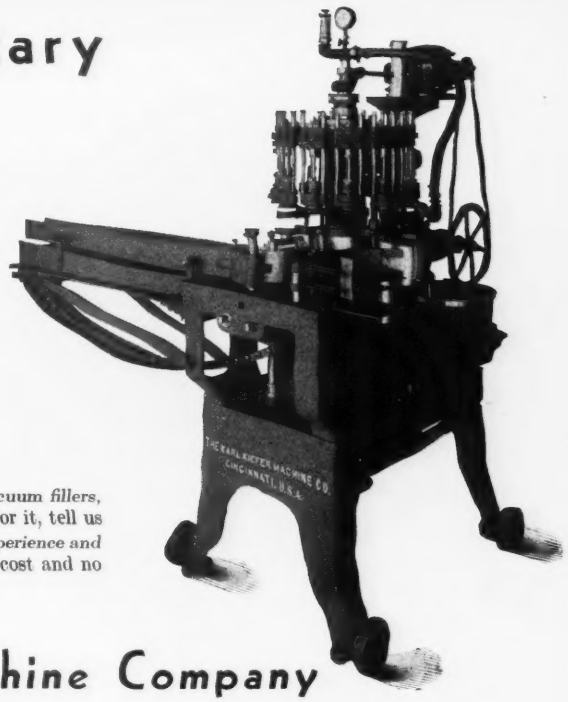
Pulverizer-Blower

A couple of months ago we had a note on the Hocking Valley hammer mill which is a little different from the usual in that it has an integral blower which may be placed on either side of the mill according to the necessities of the layout. The blower draws the milled material away from the mill making it, so it is claimed, dust proof. Those of you who have to grind crude drugs will be interested in this mill. A photo appears elsewhere in the department.

Revolution

We don't aim to set ourselves up as a prophet but once in a while our random shots hit something. Remember, when we said about a year ago that the process of grinding seemed due for a thorough revision and that such revision would probably take the form of a pressure release application? Well, this revolution has come to pass. Department of Agriculture experts have demonstrated that if enormous pressure brought to bear upon a rock is suddenly released, the rock will disintegrate into powder. The rock used in the experiment was about a foot in

Automatic Rotary Vacuum Filler



for perfumes, tonics, shampoos, antiseptics, lotions, medicines, emulsions, extracts, syrups, inks, oils, etc.

All are bottled neatly, accurately, rapidly, whether light or heavy—foamy or sticky. Regular or sprinkler top bottles handled perfectly.

Made in six sizes. Capacity, up to 150 bottles a minute.

Construction: stainless steel, pure nickel, monel metal, or bronze, as desired.

Then there are Kiefer semi-automatic, and hand-fed vacuum fillers, all types and sizes—see our catalog. When you write for it, tell us what your work is and let us see if, with our 35 years' experience and with our modern developments, we can help you. No cost and no obligation.

The Karl Kiefer Machine Company

Cincinnati, Ohio

No. 2 Rotary Tablet Machine

New and Improved!

We have no yearly models—but improvements and refinements are being constantly added to Colton machines.

There are over five hundred Colton Rotaries in use.

Superior design, sturdy construction and ease in operation have made this possible.

The No. 2 Rotary Tablet Machine has such desirable features as *positive pressure*, eliminating varying thicknesses of tablets; *hardened steel gear drive*, eliminating frequent replacement of worms used on other makes, and *sliding upper punch holders*, to hold the punches rigidly, enabling the manufacture of special shaped tablets most satisfactorily.

Write for Catalogs.

ARTHUR COLTON COMPANY

2620 East Jefferson Ave.
Detroit, Michigan

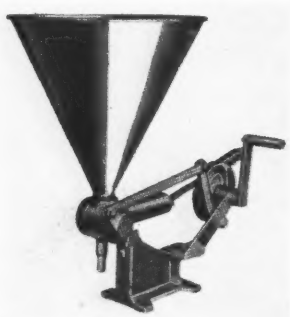
diameter. This method may prove too costly ever to reach a commercial stage. But right in our own trade a new principle has been applied to pulverization. Utilizing a combination of tremendous centrifugal force, pressure and the impact of particle upon particle, this new process will reduce particles of limestone as large as marbles to an impalpable powder *continuously*. No moving parts are employed; nothing strikes the pieces of material excepting themselves. We saw this machine in operation. We saw stones go in and powder come out so fine that you could rub it between your teeth without any sensation of grit whatever. That's all we can say about this process now; we've been battling for two months for permission to name the inventors and to show you a photograph of the outfit. But the firm behind the gun is not quite ready yet to shoot the works. It will be soon and then we'll have a yarn to spin.

Soap Milling

We have it straight from Lord Leverhulme himself, that Lever's American branch has perfected a method of refining toilet soap which does away with milling. While the soap is still in a plastic state it is forced through a series of heavy wire screens, the operation being somewhat similar to extruding spaghetti.

Filler's Filler

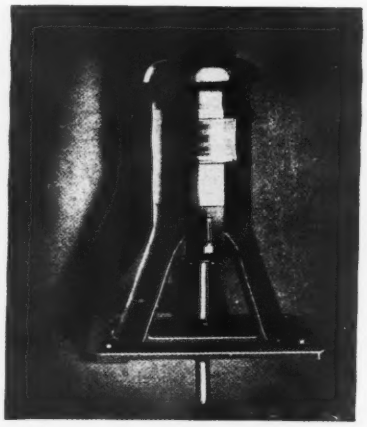
Filler Machine Company, through Charley Adams, genial New York representative of the company, announce that they have a new hand filler ready for your inspection. This is a swank little outfit and it operates on the same principle that Filler's big automatic outfits are based



upon. A hopper holds the charge, a crank actuates a plunger which draws a jarful from the hopper into a cylinder and then forces it into the jar through a filling spout. The jars are filled from the bottom upward, thus eliminating air pockets. Charley says that you can fill all kinds of creams in a hot or cold state, and clay packs and ointments. You can also fill collapsible tubes with shaving cream and tooth paste but you must first have a special filling mandrel made for the job. This is a handy little machine for small batch work. Write us.

Patterson Presents:—

The Unipower Agitator Drive in sizes ranging from ½ to 5 HP of speeds ranging from 8 to 300 rpm. The unit consists of a vertical motor and a speed reducer contained within a cylindrical housing. An oversized shaft projects downward from the motor and provides a means for attaching any one of a number of different type stirrers. You can get stirrers for different products like liquids, soaps, creams etc., so that if you have one drive



and a series of stirrers you can mix a number of different products with it. The drive is portable and can be attached to any kind of tank or kettle. The stirrers are made of all kinds of non corrosive metals and of hardwood. The drive will stand temporary overloads of 100%. And that's important.

Patterson also presents a neat little magnetic separator which can be hooked up to the feeders of your mills or sifters to pick up stray iron and nails before they get where they can cause damage.

Powder Unit

Bauer Brothers have standardized their powder unit which consists of a bucket elevator, vibrating sifter and mixing machine all of which are built into one machine. You dump the raw materials into the boot of the elevator which carries them up and feeds the sifter which in turn feeds the mixer. This arrangement makes it possible to carry out the powder operation on one floor and makes it unnecessary to clean either the elevator or the sifter after each batch.

Day's Mill

Most of you who have always thought of J. H. Day as a builder of powder mixers do not realize that this firm has a very smart ball mill for your face powder or dry milling jobs. Instead of using porcelain or flint pebbles which are likely to chip and are difficult to clean, Day employs smooth hard steel balls. The unit is very substantially built by a firm that knows face powder from the barrel to the box.

A lot of you have asked us where to buy a small hand sifter which can be used for rubbing up color and perfume base and also for sifting small batches of face powder. Day has a neat little one that you can stick over the top of a barrel or a box. Drop us a note and we will be glad to give you the low down on these units.

Powder Churn

Sometime ago we suggested a method of mixing face powder calling for the use of a revolving drum and a rapidly moving internal element similar in construction and operation to a standard butter churn. We have word from Germany that they have been tried out over there and have proved to be a boon to powder makers. We've been informed that standard units are now available in Naziland. We'll find out more about them and if they are as good as they should be theoretically, we'll wangle somebody into building them on this side of the Big Puddle.

The Doctor's Dilemma

This department is dedicated to serving the interests of production men but once in a while it is productive of a bit of fun as we get inquiries upon the most unusual topics from altogether unusual sources. For instance, we had a letter from a devoted mamma last month who informed us that her daughter, who is an actress, was worried lest her complexion be injured by grease paints which she must use in the line of duty, and did we "think that there is anything really harmful in such products?" We didn't think so but we intimated delicately that a personal interview with the daughter would enable us to determine the state of her complexion. But mamma didn't bite. So we've been crying in our beer ever since over the ingratitude of some people.

Shipping Case Sealer mentioned in the August issue

Manufacturers of: Allegheny Stainless Steel Tanks, Asbestos Disk Filters, Allegheny Stainless Steel Tanks, Asbestos Disk Filters, Neutral Asbestos Filter Sheets, Pumps, Portable Mixers, Portable Bottle Fillers; Glass Lined Tanks, Jacketed Tanks,

ERTEL Portable Bottle Filler

CAPACITY:
2 GALLONS
PER MINUTE.

• • •

No belts to slip or stretch. Few moving parts. Accurate, speedy, adjustable handle.

ERTEL ENGINEERING CORP.
108 EAST 16th STREET NEW YORK, N.Y.

The Fastest Hand Tube-Filler
—for Large or Small Manufacturers

No. 6-A. Hand Operated Tube Filler 8 gallon capacity. Jacketed Base.

For filling, folding, crimping—The "New Way" is the *fastest way*. Rodgers "New Way" *hand-operated* equipment is liked by small and large manufacturers for its economy and speed.

For larger manufacturers we also offer *power-operated* Tube and Jar Filling Machines, Closing & Clipping Machines, Package and Powder Box Filling Machines, Glass-Lined Tanks, Conveyors, Pony Mixers & Ointment Mills.

No. 9 Closer

We carry a complete line of "New Way" Collapsible tube clips in stock.

No. 1 Crimper

Send for new Catalog No. 5

GEORGE G. RODGERS CO.
183 VARICK STREET NEW YORK CITY
WAlker 5-6892 Established 1890

LABELS
ENGRAVED AND EMBOSSED
Faithful Service Since 1881
JOHN HORN
837 Tenth Ave. New York

℞ for Better Results

Executives seeking to increase the effectiveness of their detail mailings to physicians will find in the Metal Edge *Pharmaceutical Packager* the correct prescription. It describes and pictures mailing cartons used by leading houses—tells how and why the Metal Edge Packaging Method not only gives better results but in most cases shows positive economies. There may be a real idea in it for you. A copy is yours for the asking. Write.

NATIONAL METAL EDGE BOX CO.
1200 CALLOWHILL ST. PHILADELPHIA, PA.

Quality in Cosmetics

NRA MEMBER U.S. WE DO OUR PART

Established in 1929, this business has shown steady progress with each passing year. Constant growth through this period testifies to the outstanding quality and merit of cosmetics by Sterling.

Many cosmetic manufacturers have found it to their advantage to turn their rouge and lipstick manufacture over to us. We have demonstrated to their satisfaction our ability to furnish unexcelled high quality products at a most economical cost. We shall be glad to consult with you on your cosmetic items.

STERLING MANUFACTURING CO.
BELLEVILLE, N. J.

Radical Package Design

(*Continued from page 349*)

Remember what a stir Pinaud made when that round plastic powder box was introduced? Pinaud was the first big cosmetic house to make a radical departure from traditional powder packaging, which calls for paper boxes. We do not say that the Pinaud box is the most beautiful or the most practical on the market, but it certainly is still one of the most *distinguished*. The woman need not read the label to recognize the box.

Marinello was the next innovator in the powder packaging field, adopting a glass jar in conformity with the rest of a newly packaged line. Back of this change also was the desire to preserve the integrity of the perfume. But sealing difficulties later compelled the abandonment of this package. Then along came Kathleen Mary Quinlan with a lovely glass jar, sealed with a practical, decorated plastic cap. A lovely package and a distinguished one. And still more recently Pond's new powder was introduced in a flint glass jar sealed with a metal cap.

You don't have much trouble in seeing and remembering Yardley's eau d'cologne and lavender water bottles with their wicker-basket covering. Nor do you have any difficulty in recognizing Yardley's wooden shaving soap bowl. Not less distinguished one bit is the shaving bowl recently introduced by Frederick Stearns which is made of a plastic material. You do not have any trouble in recognizing Roger and Gallet's Fleur D'Amour powder in its embossed aluminum box, nor chlorosalsterol tablets in a plastic box.

It is quite likely that you remember Squibb's sodium perborate better than most of the others, because Squibb packed it in a glass bottle at a time when most

Stearns Plastic Shaving Bowl

of those on the market were in lithographed tin. Boncilla demonstrated the adaptability of opal in a striking combination of opal with deep-drawn metal caps. If we remember correctly it was Ingram that introduced shaving cream in a wide mouthed jar, an innovation for greater convenience that set the package apart and doubtless played an important role in the success of this product. At all events several others have since appeared in glass jars.

An artist may tear his hair and decry the artistry of some of the packages we've mentioned, but he can't deny that they are all *distinguished*, far more distinguished than many packages which are just pretty. Nor will that artist deny that these packages are easy to remember.

There is no gainsaying that there have been a few instances where radical packages have not been conspicuous successes. Investigation will reveal invariably that the package is being blamed for bungling merchandising methods. It is a sound merchandising axiom that if you can sell an ugly, unattractive package, you can more easily sell a distinguished one. But it should be remembered that no package, however distinguished, can hold the market for a poor product.

Obviously there are practical limitations governing changes in packaging material which must be given ample consideration. Such questions as public opinion, cost, chemical and physical compatibility, production efficacy etc. must be investigated and provided for.

Of course in some cases it is not practical to change a traditional material. But, as the adage has it: there are more ways than one of skinning a cat. Nowland of Cincinnati decided to do something about iodine and Mercurochrome. Obviously the stuff couldn't be merchandised in a collapsible tube or a paper bag or a tin can. So Nowland studied the closure and the result was a closure-applicator, which is not only itself unique but it makes the entire package unique.

The true note of the orange flower

FLEURS D'ORANGER

Most unusual is this du Pont Aromatic. It possesses all the effects of the true orange flower, without the usual bad effects caused by discoloration. For this reason it is an ideal product for creams.

SEND COUPON FOR SAMPLES

DCI-10

E. I. DU PONT DE NEMOURS & CO., INC.
Organic Chemicals Dept., Fine Chemicals Division,
Wilmington, Del.

Gentlemen: Please send me samples of your FLEURS D'ORANGER

I am a manufacturer of _____ Firm _____

Name _____

Address _____

City _____ State _____

DU PONT
Reg. U. S. Pat. Off.

AROMATICS

E. I. DU PONT DE NEMOURS & CO., INC.
Organic Chemicals Department
Fine Chemicals Division, Wilmington, Del.

Audrey Allyn is line offered by the newly formed Audrey Allyn Company which has been formed to sell cosmetics on skin health basis to beauty shops by direct demonstration to individuals.

The latest style capless tube is being used to make a very attractive package for Americe facial masque. Unique feature of this tube is that it comes completely sealed, being opened by punching a hole through the tin at top.

Coty are offering handsome Christmas sets of good finished cases containing powder, rouge and lipstick. Shades of the various products are available to suit individual taste of the user. Packages are produced in modern design.

Modern CREAM BASES

Easily applied to your present processes

PROTEGIN X—

an odorless absorption base containing the only important and active ingredients of lanolin, from which it is derived. For neutral or acid water-in-oil creams and ointments.

TEGIN—

a wax-like base related to the natural fats. It is a ready base for neutral oil-in-water emulsions. No saponification necessary!

PRESERVATIVES and ANTISEPTICS

NIPAGIN M, NIPASOL M, and NIPABENZYL. Phenol coefficients: 3, 17, and 109. Neutral, odorless and non-irritating.

Recommended for their high efficiency in agar emulsions, gum solutions, eye washes, hair waving preparations, vaginal douches, vegetable oil emulsions, skin creams, and in any products which require an antiseptic or preservative. Samples and complete particulars will be sent upon request.

Th. Goldschmidt Corp.

70 Pine Street New York

Cost —

NRA MEMBER U.S. WE DO OUR PART

A Vital Factor Under The N R A

Labor and Material Costs can be determined in advance—Certain cost items cannot be predicted: i. e., those due to faulty or poor choice of materials, non compliance with specifications or Government labelling requirements, spoilage, etc.

INSURE against such UNCERTAINTIES by REGULAR TESTING and RESEARCH.

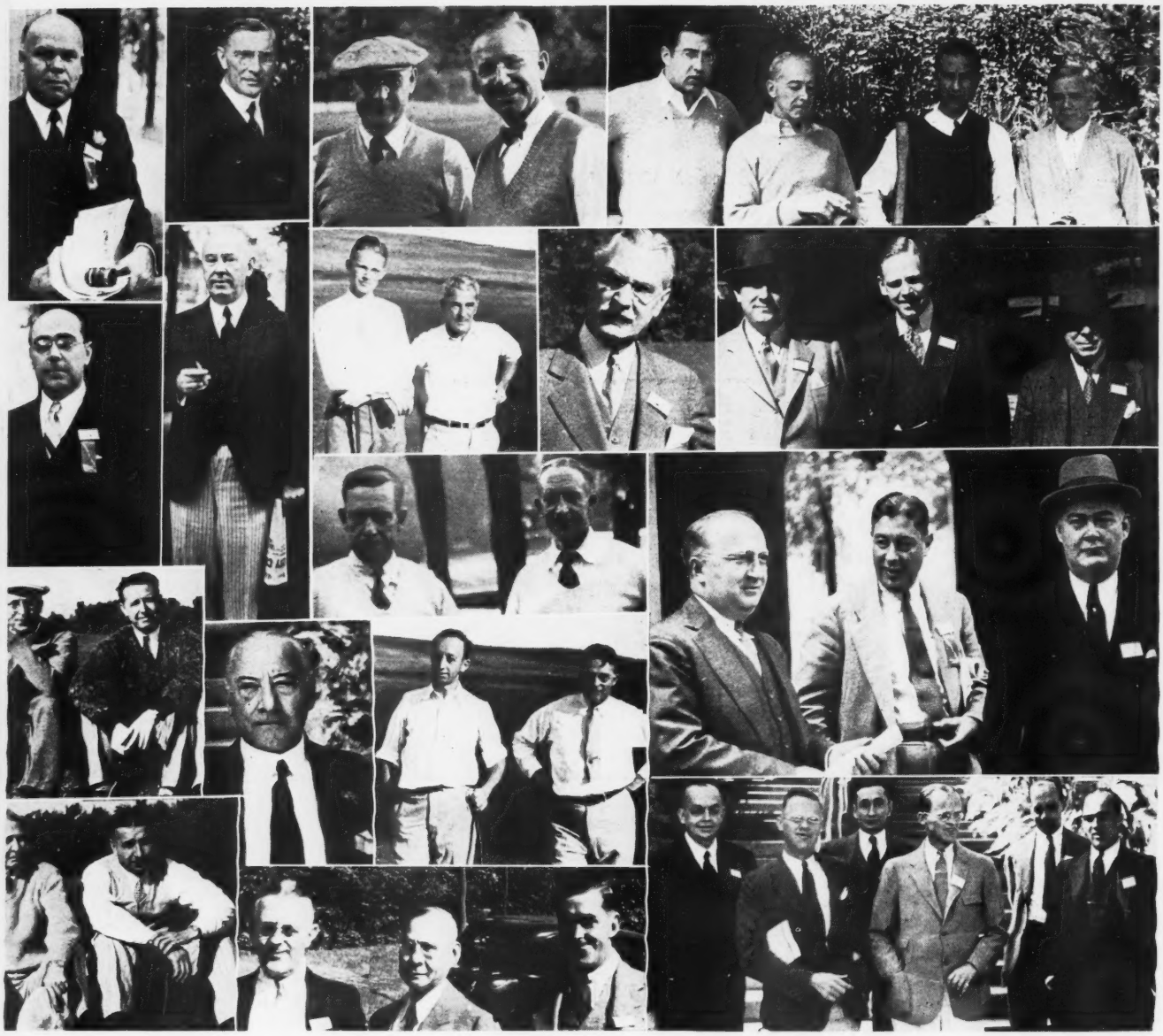
We have had over twenty-five years of experience in such problems of the DRUG, COSMETIC and DISINFECTANT Industries and cordially invite your inquiries for periodic and special testing, and advisory services.

PEASE LABORATORIES, INC. HYGIENE MEDICINE INDUSTRY

PEASE LABORATORIES, Inc.

CHEMISTS, BACTERIOLOGISTS and SANITARIANS

39 West 38th Street New York



Above are shown a number of manufacturers in attendance at the N. W. D. A. meeting at French Lick Springs. At the top are Dr. E. L. Newcomb, Executive Vice-president and Secretary of the association; George W. Simon of Heyden Chemical Works; G. L. Ringel (Columbus) and B. F. Zimmer (Chicago), both of Fritzsche Brothers; F. N. Dodge of Harriet Hubbard Ayer; Northam Warren; H. L. Brooks of Houbigant; Fred J. Griffith of Pennsylvania Drug Co.; Second line shows Eli Lilly, chairman of the entertainment committee; A Homer Smith of Sharp & Dohme; George Cain; R. K. Snow of The Dow Chemical Co.; H. C. Weicker of Dodge & Olcott; P. C. Magnus of Magnus, Mabee & Reynard; E. M. McKallor; L. D. Etman. Below Mr. Snow are W. A. Armstrong of Harold F. Ritchie & Co.; Cecil Smith of Yardley. Below Mr. Lilly are W. G. Adams of Einson-Freeman Co.; and John V. Powers of Fougera & Co. Then to right are A. A. Wassercheid of Mallinckrodt Chemical Works; Leland I. Doan of The Dow Chemical Co.; E. D. Slater of U. S. Industrial Alcohol Co. Lower row shows H. M. Hewitt of Smith Drug Co.; James C. Chilcott of Maltine Co.; Phillip Rising of Charles Pfizer & Co.; Maxwell Hott of Syrup Pepsin Co.; C. R. Webber of Packer Manufacturing Co.; W. J. Zick of Stanco; Ted Strong of Strong Cobb & Co.; W. J. Andree of Sinclair Refining Co.; Clayton S. Shoemaker of Shoemaker Corp.

Wholesalers Assembled

(Continued from page 331)

require any regulation a special law for that purpose should be enacted. Including these products in the category of drugs is likely to menace their free distribution and drastically narrow their channels of trade, for the majority of the States have laws limiting the sale of drugs to establishments having registered pharmacists in their employ. This would automatically exclude great department stores as agencies for the distribution of cosmetics which are now sold in enormous quantities by those establishments.

"Another questionable feature of the proposed bill clothes the Secretary of Agriculture with certain powers to censor advertising other than that appearing on the labels, cartons and accompanying literature of the goods

Magnus, Mabee & Reynard, Inc.

ESTABLISHED 1895

Main Sales Office :: 32 Cliff Street, New York

Boston - Philadelphia - Chicago - Atlanta

◆◆◆

The MM&R Policy—a service specializing in your requirements of MM&R products comprising raw and finished materials from the four corners of the earth. Many of the problems in securing a constant supply are governed by customs and tariff barriers, correspondence in many foreign languages, international finance, war and political upheavals, crop failures, etc.

ESSENTIAL OILS
BALSAMS
AROMATIC CHEMICALS
OLEORESINS
CERTIFIED COLORS
FLAVORING MATERIALS
BASIC PERFUMING PRODUCTS
INFUSED OILS
OIL CHAULMOOGRA
TERPENELESS ESSENTIAL OILS
TONQUIN MUSK
MOHAWK BRAND OIL PEPPERMINT
MOHAWK BRAND SOLUBLE EXTRACT COFFEE
PARAGON OLIVE OIL
ROSESOL MM&R
FILTER PAPERS

M M&R MAGNUS

"LINKS THE MARKET WITH THE MANUFACTURER"

ISCO CHEMICALS ESTABLISHED 1915

Silver Talc

IT'S WISER

to be sure your basic ingredients are the best obtainable than to spend money, time and effort merchandising a product where repeat business lags. And lag it will in spite of the cleverest advertising and most thorough distribution if the product itself is faulty.

If you use talc as a base send for samples of

ISCO SILVER TALC

Notice its uniform fineness, its whiteness, its purity. Rub some on your hands and note its freedom from shine and yet how much "slip" it really has.

If you are not familiar with the new ingredient for cosmetic creams—

AQUAPHIL

ask for sample. It absorbs 500% of its own weight in water.

We are also importers of White Seal Zinc Oxide, Magnesium Carbonate, Rice Starch, Zinc and Magnesium Stearates, Precipitated Chalk.

INNIS, SPEIDEN & CO.

INCORPORATED

117-119 Liberty St., New York City

Niagara Falls Jersey City Owego, N. Y.
Chicago Boston Gloversville, N. Y.
Cleveland Philadelphia

as they go to the consumer. The Federal Trade Commission has been prosecuting this work for many months with a reasonable degree of efficiency and in this connection there has been a very satisfactory liaison between the Commission and the Department of Agriculture. It does not appear that any good purpose could be served by duplicating the agencies engaged in this work."

H. J. Ostlund, statistician of the association, gave some interesting information in his report. Excerpts:

"There are 130 houses that sent in replies to our questionnaire. These replies indicate that sales in the first six months of 1933 as compared with the first six months of 1929 declined 37.4 per cent. The decrease in sales is apparently not uniform throughout all sections. In the Eastern Territory, it is approximately 25 per cent; in the Central Territory, 44.4 per cent; in the West, 39.8 per cent; and the South, 40.6 per cent. There evidently is not a great deal of difference in the decline in sales between the houses in smaller cities and those in larger cities. In cities under 100,000 population, our membership reports a sales decline of 38.8 per cent, and in the cities over 100,000 a decline of 37.2 per cent.

"Replies to a questionnaire sent out by the Harvard Bureau of Business Research on behalf of the Manufacturers' Committee covered sales and certain other data for the years of 1929 and 1932. The decline in sales volume in 1932 as a per cent of 1929 was 30.8 per cent. Figures of our own survey and the Harvard survey are not exactly comparable for the reason that the Harvard survey compares the entire year 1932 with the entire year of 1929, while the more recent survey deals only with the first six months of 1929 and 1933, and there was a considerable shrinkage in volume during the first six months of 1933.

"Figures with respect to employment are also interesting. Those who reported definite data on employment said that you had 9,558 employees outside of the executive drawing over $100 a week and salesmen in 1929. In 1933 the same houses had 7,281 employees in the same classes, representing a decline of 23.8 per cent in employees as compared with a decline of 37.4 per cent in sales between the two periods. These declines in employment in different sections of the country turn out to be, first, for the East, 22.9 per cent; for the Central States, 27.2 per cent; in the West, 19.6 per cent; and for the South, 23.6 per cent. In cities under 100,000 population, the decline in employment was 18.4 per cent, while in the cities of over 100,000, the decline was 24.8 per cent."

That manufacturers are still vitally interested in the wholesale members of the N. W. D. A. as distributors of their goods was clearly indicated not only by the attendance, but also by the goods sized list of new associate members, which list included: Barbasol Company, Indianapolis; Compana Sales Company, Batavia, Ill.; Edros Natural Products, Inc., New York; Hexin, Inc., Chicago; Lockwood Brackett Company, Boston; Lucky Tiger Manufacturing Company, Kansas City, Mo.; Modess Corporation, New York; National Oil Products Company, Harrison, N. J.; Schering Corporation; Spencerian Pen Company, New York; C. H. Young, Nela Park, Cleveland; Young Rubber Company, New York; United Remedies, Inc., Chicago. G. Kondon Manufacturing Company was reinstated as an associate member.

New Medicines

(*Continued from page 335*)

Immerfroh—Tablets made from cola nuts, Brazil tea and lecithin. Also claimed to contain active prniciple, colatine, because it is made from fresh cola nuts. Used as a restorative.

Ischrheumeu.—Grayish brown powder, amorphous, slightly astringent taste, which gradually develops sweetish taste when left on tongue long enough. Claimed to be an iodized combination of derivatives of pyridin; also contains traces of lithium salts and acetylsalicylic acid and its salts as well as colatine and theobromine. Used in cellular therapeutics, as cell irritant. For muscular rheumatism, articular rheumatism, lumbago, sciatica, peripheral and central neuralgia, vasomotor neuroses with migraine attacks, sympathicotoniae, colds, grip, grippy diseases, dysmenorrhoeal difficulties. Package contains 8 powders. Allgemeine Tierarzneimittenfabrik G.m.b.H., Rostock, Germany.

Josicol—Clear, reddish liquid. Contains 2 grams of potassium iodide in 3% colloidal silicic acid solution, which is protected against gelatinization by an inorganic serum protective colloid. For hardening of arteries as well as scleroses of all sorts and resulting conditions therefrom. Dose: 5 drops in teaspoon of water 3 times daily. Fabrik Chemische Pharmazeutische Praeparate, Apotheker Paul Bolder, Koeln a. Rhein.

Juvenal—Chocolate covered tablets. Contain 0.01 gram sodium nucleinate, 0.09 gram lecithin cerebrum, 0.05 gram calcium glycerinophosphate, 0.15 gram extractum guaran., obduc. cacaon. For treating general functional disturbances of organism, neurasthenia, hysteria, in psychic nervous disorders, in nerve weaknesses. Dose:—one to three tablets per day. In tubes containing 12 tablets and in packages containing 60 tablets. Derupharma G.m.b.H., Hamburg 21.

Ka—Light brown liquid. Consists principally of ground poppyseed, lactose, calcium carbonate, oatmeal and an albumen forming light yellow flakes, possibly serum albumen. Also contains organically combined lime, silicic acid, natural iron, iodine, manganese, phosphorus, potassium, magnesium and sulfur compounds as well as other salts of blood serum, vitamins, lipoids, lecithin and carbohydrates. For nourishing blood and nerves. Fahrmazan, Berlin-Schoeneberg.

Kolaferrin—Sugar-coated pills, each weighing 0.5 gram. Contains extractum colae, foliae cocae, iron glycerinophosphate, faex, hypophysis extract, lecithin, hormones. It is also claimed that this preparation con-

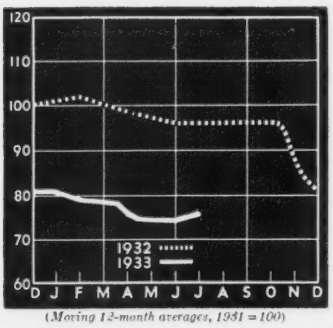
(*Continued on page 406*)

ADVERTISEMENTS — *Each article on this page is a paid advertisement.*

ALCOHOL NEWS

OCTOBER ★ A Monthly Series of Technical Articles for Chemists and Executives ★ 1933

ETHYL ALCOHOL PRODUCTION



(Moving 12-month averages, 1931 = 100)

		1933	1932
PRODUCTION			
1000 proof gals.	Jan.-July	63,855	77,290
	July	11,684	11,908
	June	10,683	10,577
SALES			
1000 proof gals.	Jan.-July	56,954	61,365
	July	9,345	10,578
	June	9,471	9,570

CONSUMPTION CONTINUES STEADY LARGER DISTRIBUTION FORECAST

Steady delivery of all grades of denatured alcohol to consumers against former contracts continued during the past month.

Production of ethyl alcohol, either for denaturization or for direct consumption, is increasing in volume with the outlook favoring expansion in distribution. Latest reported statistics for production and sales are for July and in both cases the totals for the first seven months of the year are below those for the same period of last year.

Some of the large consuming industries, however, have improved their position over that of a year ago and consumption of alcohol from now through December promises to compare more favorably with the 1932 period.

With production costs moving upward, prices have maintained a firm tone. Current quotations at producing points are:

C. D. No. 5

Drums, carlots	34¢ per gal.
Less carlots—1 to 4 drums	42¢ per gal.
5 or more	40¢ per gal.

C. D. No. 10

Prices are 1¢ per gallon higher than C. D. No. 5

S. D. No. 1

Tanks	29.5¢ per gal.
Drums, carlots	33.5¢ per gal.
Less carlots—20 drum lots	35.5¢ per gal.
5–19 drums	39.5¢ per gal.
1–4 drums	41.5¢ per gal.

(Anhydrous grade 5¢ higher)

Ethyl, 190 Proof, tax-paid

Tanks	$2.375 per gal.
Drums, carlots	$2.415 per gal.
Less carlots—20 drum lots	$2.435 per gal.
5–19 drums	$2.515 per gal.
1–4 drums	$2.535 per gal.

Prices on C. D. No. 5 and C. D. No. 10 are for delivery to February 1, 1934, and on S. D. No. 1 and Ethyl, prices are for delivery prior to January 1, 1934.

NEW RESEARCH LABORATORY

A new research laboratory, believed to be the largest of its kind in the world, is being constructed for Eli Lilly & Co., manufacturers of pharmaceutical and biological products, at Indianapolis, Indiana. The structure will be of brick construction, four stories high, and will occupy the greater part of a city block. The entire space will be devoted solely to research work.

Plans were originally drawn up in 1929, but were tabled pending the arrival of more settled business conditions.

QUART BOTTLE INTRODUCED IN U.S.I. PURE ALCOHOL PACKAGES

The popularity of the pint-bottle packages for pure alcohol with permittees, has led the U. S. Industrial Alcohol Co., to introduce a complete new line of quart-size packages, which are now ready for shipment on all five brands of pure alcohol produced by the company.

Realizing the advantages and convenience of a glass container, the new quart line is of the same general design of the present pint bottles and is fitted with the same style moulded caps and Cellophane wrapped to insure absolute protection.

These will be boxed 8 and 12 to the case, thus affording the same advantages as the pint bottles but will eliminate the number of individual packages. The other convenient containers already in use for all five of the U. S. I. brands of pure alcohol will be continued. These include the five-gallon drums for large individual shipments, the one-gallon cans contained in strong fibre boxes, and the pint-size bottles in quantities of 16 and 24 to the case.

BOAT-RACING FUEL DEVELOPED UTILIZING 190 C. D. ALCOHOL

The employment of alcohol as a power fuel is finding an ever-increasing market, particularly for use in high-speed racing engines.

A fuel is now on the market known as HI-REV Speed Fuel, which utilizes 190 proof completely denatured alcohol together with small percentages of other ingredients. It is manufactured in three different formulas; one for use in two-cycle outboard marine engines contains a full lubricant incorporated directly in the fuel itself. The second is designed especially for four-cycle marine racing engines and contains no lubricant. The third is intended for use in special high-speed four-cycle engines, such as aeroplane, automobile, and motorcycle engines, and contains a small percentage of head lubricant.

It is claimed that HI-REV will increase the average speed of racing outboard motors approximately three to four miles per hour and will increase the revolutions per minute from 200 to 400 over that obtained with high-grade gasolines.

HI-REV Fuel was used in several championship outboard motorboat races during the past season and succeeded in establishing several new world's records for speed. The denatured alcohol employed is supplied by the U. S. Industrial Alcohol Co.

At the present time this fuel is made available in five-gallon steel drums—the most practical type of container.

OINTMENT FROM COAL TAR

A skin ointment has been devised from crude coal tar. The process involves the passage of steam through a hot solution of the tar. The resulting steam-volatile fraction is separated and redistilled. The ether-soluble substances are extracted and the resulting extract is filtered. The solvent is then removed by distillation and filtration and the resulting product is an ointment said to be useful in treating skin infections.

Trichlor—Tertiary Butyl Alcohol is claimed to be one of the most effective remedies for seasickness. It is frequently prescribed by physicians and can also be obtained in a proprietary.

ALCOHOL AGE PREDICTED BY PROMINENT BRITISH SCIENTIST

As we now receive three-quarters of our power from the source of coal and oil, in time to come we shall look to alcohol as the chief source of energy according to a recent article entitled "Alcohol—Fuel of the Future" by Julian Huxley, eminent British scientist.

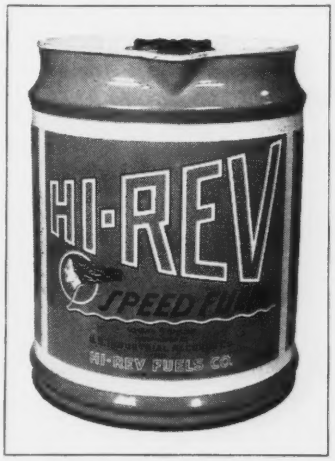
All the power that can be obtained by harnessing the tide, the wind and the sun combined, will not fill the demands of the future. Subatomic energy as a commercial source of energy is extremely unlikely in the near future. Where then shall we look for our supply?

It seems to be in plants. As long-dead plants now supply us with our source of energy, for tomorrow we shall probably look to living plants. Pure alcohol is not only an excellent fuel, but can be produced extremely cheaply from any sugary or starchy substance.

The recent discovery of the method of producing anhydrous alcohol has added a tremendous step. Ten years ago, alcohol with four per cent water was the best that could be hoped for commercially. This trifle of water made all the difference in alcohol as a fuel. Already many nations are using a portion of alcohol in their motor fuels and it is more than probable that more still will save on their imported fuel by making a good deal of alcohol out of home-grown crops.

But, in the long run, it is likely that we shall use the tropics, where plant life is so luxuriant, as our great source of power alcohol. There we could easily grow enough vegetable matter to supply all the world. A hundred or two hundred years from now great factories near the Equator will distill the alcohol, tank steamers will transport it—in fact, it will be handled much as oil is now, only there will be ten times as much used. It will be the Alcohol Age. In that age the tropics will have become the center of power production, and the world's economic geography will be drawn on quite different lines from those of today.

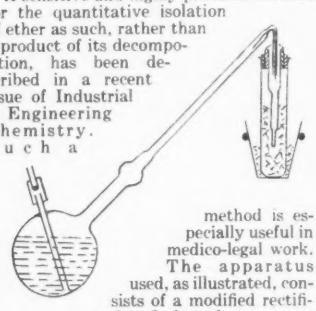
(Copyright, 1933, by The Living Age Co. Used by special permission.)



190 Proof Completely Denatured Alcohol is used in the manufacture of HI-REV Speed Fuel. The fuel is packaged together with lubricant in the 5-gallon lithographed drum shown above.

QUANTITATIVE ISOLATION OF ETHER FROM DILUTE SOLUTIONS

A sensitive and highly practical method for the quantitative isolation of ether as such, rather than a product of its decomposition, has been described in a recent issue of Industrial & Engineering Chemistry. Such a



method is especially useful in medico-legal work. The apparatus used, as illustrated, consists of a modified rectification flask and a separate receiver and cooling tube. The ether is isolated by direct distillation, and condensed in the separate receiver, which in turn is immersed in the condenser containing an acetone-solid carbon dioxide mixture. This also serves to freeze out any water vapor coming with it on the upper walls of the receiver. In the narrow tube connecting the rectification flask and the receiver, a small copper wire is inserted to prevent any condensation of the ether before reaching the receiver.

Permits direct reading

The receiving tube is calibrated so that immediately after the completion of condensation, it may be taken out of the cooling tube and transferred into a metal tube of a hand centrifuge and the liquid contents centrifuged to the calibrated portion. The reading is taken after the tube has warmed to room temperature. The water vapor frozen out in the upper part of the receiver melts as the centrifuging is done and remains in small droplets on the walls of the upper part of the receiver. Hence it does not interfere with the reading.

The whole procedure is quite simple but it is thought wise to practice it a few times with a solution of known ether concentration before putting it to actual use.

GALLONS VS. POUNDS

Formulas reading in terms of pounds or gallons may be easily reversed by this simple method.

To determine the number of pounds in a volume of liquid measured in gallons, multiply the number of gallons by 8.33 and this product by the specific gravity of the liquid. For example, to determine the weight of 50 gallons of Amyl Alcohol:

$50 \times 8.33 \times 0.817 = 340.28$ lbs.

and conversely, a given weight to the number of gallons is as follows for 200 pounds of Amyl Alcohol:

$200 \div (8.33 \times 0.817) = 29.39$ gals.

USES OF ALCOHOL IN INDUSTRY—No. 5

PERFUMES AND COSMETICS

From time immemorial, cosmetics have played an important part in the history and advances of the human race. In the dim history of Arabia, the word "Alcohol" was born —then known as "Al-koh'l," a cosmetic applied to the eyebrows.

The cosmetic and toilet preparations industries of today are so dependent on alcohol that were this indispensable component not available, they would virtually cease to exist.

In the cosmetic field, alcohol serves the triple function of solvent, preservative and skin tonic.

The delicate perfumes which grace milady's boudoir all contain a large percentage of alcohol. This is the important vehicle which carries the odor and preserves it unchanged for any length of time. Not only is alcohol the vehicle in fine perfumes, but it is the solvent used in extracting odoriferous principles of the necessary raw materials. As illustrations, concentrates of civet, ambergris, vanilla beans, benzoin, myrrh and many others, are all prepared with alcohol before incorporation in the finished perfumes.

Hair tonics, hand lotions and toilet waters almost without exception contain alcohol. Here, the alcohol serves several purposes. It keeps the perfume materials in solution, acts as a healing agent for rough and irritated skins, preserves the preparation from souring or deterioration, and imparts an unusual brilliance to any added color.

In many popular wave sets, alcohol is used. These preparations are made from gums such as tragacanth and India gum, which are treated with water to give a smooth jelly. Alcohol is then added. Such solutions have the advantage of drying quickly on the hair and will keep indefinitely owing to the preservative action of the alcohol.

Numerous other uses can be cited such as tooth paste, transparent soaps, shampoos, vanishing creams—all of which employ alcohol somewhere along the line of manufacture.

Of more modern development, are the nail enamels and enamel removers. These products are mainly of alcohol origin. Essentially a nail enamel is a thin solution of nitrocellulose (soluble cotton) in a mixture which evaporates rapidly leaving behind a glossy and tough film. The removers are single solvents or simple mixtures.

TECHNICAL DEVELOPMENTS

An automatic tester to determine the hardness of water is another application of the photo-electric cell. Used in connection with water softeners in industrial plants, the machine periodically takes a sample from the soft water supply, sucks it into a tube, injects a chemical, squints through the sample, and if the water is too hard, rings a bell or flashes a red light.

* * *

A new stearic acid base for creams and soaps, made entirely from animal fats, having a melting point of over 139°F. and an iodine value of approximately 0.8, has been placed on the market recently.

* * *

An electric color matcher, for use in matching face powder shades, has recently been placed on the market. It operates on a photo-electric cell from an ordinary lighting circuit and records color variations between a master sample and the batch samples directly on a meter.

* * *

A base for producing salves in pencil form is suggested as follows: 10 parts coconut oil, 30 parts white beeswax, 22 parts lard and 35 parts lanolin. The base should be carefully melted and agitated and the pulverized medicament thoroughly mixed in the melted mass before it congeals.

* * *

Odorless nail enamel bases have been developed to meet the vogue for perfumed nail enamels. Experimental work has produced several bases which have a pure odor without the overtones due to the use of conventional solvents. Anhydrous denatured alcohol combined with certain esters of negligible odor characteristics is employed.

* * *

A binder for making pills is suggested as follows: 3 parts glycerin ointment and 3 parts kaolin; or, 5 parts magnesium carbonate, 0.3 parts gum tragacanth and 10 drops of glycerin. This is said to be useful in making pills containing valerianated menthol, quinine hydrochloride, digitalis leaves and other substances.

* * *

Perfect "kills" of insects are secured in the remarkably brief period of three hours with a recent development in the field of fumigation—the Calcynator. This is a portable machine which can be employed in fumigating flour milling equipment, cars, loaded vans, and in a fumigation room, a great variety of infested raw and manufactured products.

* * *

A method for the quantitative determination of essential oils in extracts and toilet preparations, used by the U. S. Bureau of Industrial Alcohol is described as follows: place 10 cc. of sample (5 cc. when oil content exceeds 5% by volume) into a Babcock bottle, add 0.5 cc. of a 1:1 mixture of mineral oil U.S.P. and water-free kerosene, and 1 cc. of hydrochloric acid (1:1); fill to the shoulder with saturated salt solution, shake three minutes, add salt solution to raise oil column to graduations. Then centrifuge at high speed for 10 minutes and read the oil volume.

* * *

A new test bottle for use in determining the percentage of fat or oil has been designed as shown. It is provided with a large opening to permit lumpy or viscous materials to be deposited directly in the bottle and also to allow the use of a stirring rod. This opening is fitted with a rubber stopper which does not interfere with the fat rising into the tube. It is primarily intended for use in the centrifugalizing process for determination of percentage of fat, and may be used for the Babcock test, the Gerber method, or modifications. The reading tube is made with various graduations, depending on the fat content of the substance to be tested.

U.S. INDUSTRIAL ALCOHOL CO.

WORLD'S LARGEST PRODUCERS OF INDUSTRIAL ALCOHOL

ETHYL ALCOHOL

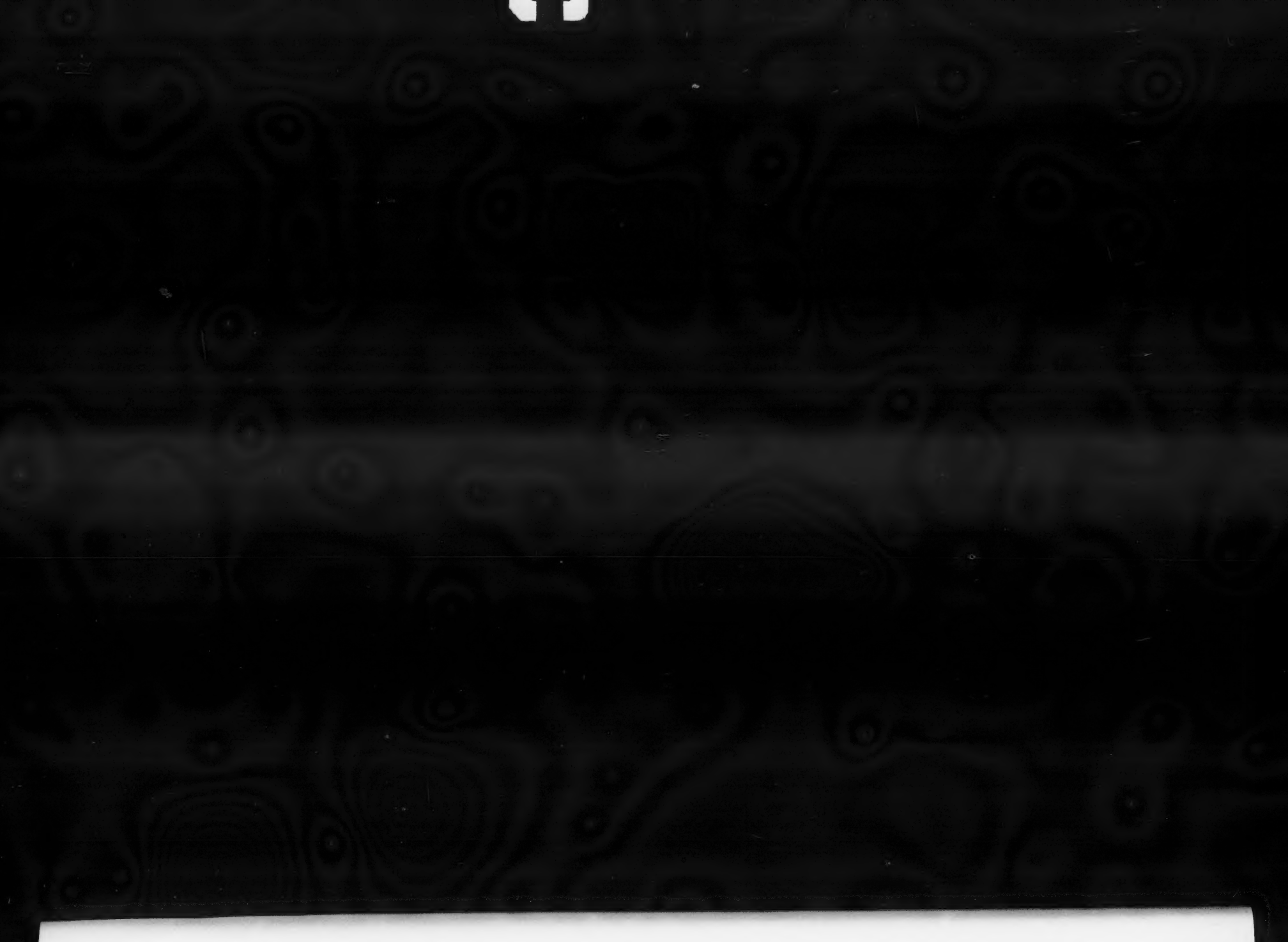
SPECIALLY DENATURED-*All Formulas* • COMPLETELY DENATURED-*All Formulas* • ANHYDROUS-*Denatured* • ABSOLUTE-*Pure*

SOLOX-*The General Solvent* • PYRO-*The Standard Anti-Freeze*

PURE (190 PROOF) TAX PAID — TAX FREE

U. S. I.—U. S. P.-*Ethyl* • WEBB'S-*Ethyl* • SUNSHINE-*Grain* • GREENDALE-*Grain* • SUNSHINE-*Ethyl*

Executive Offices: 60 East 42nd Street, New York, N. Y. Branches in all Principal Cities.



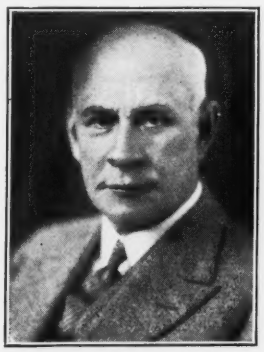
News

Regulatory

Blair Attacks Drug Act

Frank A. Blair, long-time president of the Proprietary Association, has made public a statement opposing the proposed new Federal pure food and drugs act. His statement reads in part as follows:

On the face of Professor Tugwell's interpretation of the proposed new Federal pure food and drug act (the "Tugwell Bill"), this bill would seem to be an answer to the prayers of all honest manufacturers, advertising agents, and publishers for some method of slaying "the big bad wolf" of advertising practice.



Frank A. Blair

Actually, though, according to eminent authorities, the Tugwell bill is an attempt to take away from the people the right of self-medication and to restrict or destroy industries that pay a large portion of the government expense and a good part of the national advertising bill amounting to about $345,000,000 in 1932.

What we are concerned with are the evils of promulgating new laws for the restriction of simple package medicines when an investigation would tend to show that in no other instance is the public so well protected under existing laws as in food and drugs. These protective agencies under existing laws and under which the nation's health has steadily improved, even to the point of increasing longevity, are three-fold:—

1. The right of the drug administration to prosecute the manufacturer;

2. Through the postal laws, to deny the use of the mails;

3. Prosecution under the Federal Trade Commission act.

Is there need now for new laws to eliminate the advertising of any preparation that can be proven worthless? Are not the seizure powers of the Federal Trade Commission act and the denial of the mails controlling factors of such preparations? Is it not an interesting corollary that many of the medicines cited by Professor Tugwell as "bad examples" have already been put out of existence by present laws?

Professor Tugwell has said nothing about the conflict between State and Federal laws, should the new bill become a law. It has taken years to bring State laws into reasonable conformity with the present Federal laws. If the new legislation is enacted, the manufacturer will find his labels in conflict, and he faces the danger of breaking one law to comply with another.

Manufacturers believe that the existing Federal pure food and drug law is adequate to take care of all labelling offenses. Limitations imposed by the proposed new law would involve writing labels so complicated and confusing as to actually hamper distribution. The printing of a formula and warnings on the label will not prevent the purchaser from taking a remedy.

Professor Tugwell cites the Advertising Review Committee, the American Newspaper Publishers' Association, the National Editorial Association, the National Association of Broadcasters, and the Advertising Federation of America as favoring his new legislation. According to his own quotation, however, the Advertising Review Committee favored advertising that would be drawn along simple and broad lines permitting a flexible interpretation. The American Newspaper Publishers' Association, the National Editorial Association, and the National Association of Broadcasters favored legislation that would provide reasonable regulation.

It is pertinent, then, to inquire if the pending legislation actually does provide reasonable regulation. It is this angle that has aroused opposition to these bills. It is the consensus of opinion of good legal minds that the pending bills do not constitute reasonable regulation, but that they do constitute the transference of judicial power from the courts to bureaucratic control that will cause the complete demoralization of the industries affected.

Professor Tugwell stated that, if the bills are passed, the advertising fraternity can do most of the actual policing. The fact that any law giving any governmental department undue power may be exercised only at the discretion of that particular department, in no way lessens the potential dangers of persecution under that particular law and at the hands of that particular department.

In the Tugwell bill, an advertisement is deemed false if in any particular it is untrue, or by ambiguity or inference, creates a misleading impression.

Manufacturers seriously object to the language employed in this definition, for, in itself, it is ambiguous. Their right to do business and to remain out of prison depends wholly upon the construction that the administration officials put upon the words, "ambiguity" and "misleading impression."

It is the contention of manufacturers that any fair advertising law should be written in terms that are definite and understandable, and to be subject to court review in case of controversy.

Such eminent jurists as the late Ex-President Taft, and Chief Justice Hughes, have ruled that false advertising claims must also be fraudulent as a matter of law; yet, in this legislation, the advertiser is held guilty for what may be construed as ambiguity or a statement that is likely to create a misleading impression. The decision lies entirely with the administration official who is reviewing the advertising. Thus, a statement that will be perfectly plain to 99 out of 100 readers, if ambiguous to the examiner, will constitute a violation of the new law, and a possibility of resultant fine and imprisonment.

The measure holds, according to Professor Tugwell, that an advertisment is false if any disease is mentioned for which the drug is not a specific cure, unless it state with equal prominence that the drug is not a cure for such disease. It is generally recognized that there are comparatively few specifics. Why, then, compel the manufacturer to adopt negative advertising if his medicine is a palliative and not a specific? The public buys laxatives for their laxative effect, and not as cures for constipation. Is the interest of the public better served by compelling the manufacturer to say in his advertising that his medicine will not cure constipation?

The Tugwell bill, as interpreted by Professor Tugwell, declares that an advertisement is false if any representation is made either directly or by ambiguity or by inference, which is contrary to general agreement of medical opinion. The courts have repeatedly ruled that they will not recognize any particular school of medicine. How, then, can there be such a thing as a general agreement of medical opinion? Under the existing law, drug administration officials have repeatedly been asked to say whom they considered the authorities that made up the consensus of modern day medical opinion. However, they have always refused to designate such opinion. But, under the proposed new law, the advertiser is held guilty if his advertising does not conform to such opinion.

Proprietary Assn. on Drug Act

The Proprietary Association held a meeting at the Hotel Biltmore, New York, October 10, which was addressed by William S. Groom, head of the Thompson-Koch Co., Cincinnati, advertising agency. The latter spoke on the subject of the proposed food and drugs bill. Frank A. Blair, president of the association, presided.

Drug Act Discussion

The regular quarterly meeting of the American Institute will be given over to consideration of the proposed Food and Drugs Act. David F. Cavers, professor of law at Duke University, who collaborated with Rexford G. Tugwell, assistant secretary of agriculture, in preparing the bill, will be the principal speaker at this meeting will be held at the American Museum of Natural History, New York, November 3 at 8.30 P. M.

Other speakers will be W. R. M. Wharton, chief of the Eastern district, Food and Drug Administration, and Laurence V. Burton, editor of "Food Industries." Dr. H. C. Sherman, Columbia University, will preside.

A dinner will be held preceeding the meeting at 7.00 P. M. which will cost $1.50 per plate. There will be no charge made for the meeting afterwards, but tickets must be secured in advance from the American Institute, 60 E. 42 st., New York. Telephone—Murray Hill 2-6150.

Drug Seizures

The Federal Food and Drug Administration initiated seizure proceedings against 112 consignments of foods and drugs during September, reports W. G. Campbell, Chief. The Administration also sent to the Solicitor of the Department of Agriculture recommendations for prosecution of 34 cases. Notification was received from Federal courts of the termination of nine criminal prosecutions of violators. Fines ranging from $10 to $500 were imposed.

Seizures for the month included medicinal products which bore false and fradulent claims for cure and treatment of disease. Among these were several consignments of "Histeen," shipped by the Histeen Corp., Chicago, Ill., which was labeled with unjustifiable claims for treatment of asthma and hay fever.

Another seizure involved a large consignment of "Syl-Vette," shipped by Syl-Vette, Inc., Wheeling, W. Va., to a Washington, D. C., drug store. The product was labeled as "a new safe reducing food," "a natural reducing food." The article is high in food value and would not, of itself, effect any reduction in flesh.

Criminal prosecutions terminted during the month, or for which the Administration received notification of termination, resulted in fines against the following companies:

Elwood J. Goodier, Trading as Universal Laboratories, $100. The defendant pleaded guilty to interstate shipment of adulterated and misbranded vanilla flavor.

Philip Silvershein and Simon W. Epstein, and Philip Silvershein, Inc., $75. The defendants were fined $25 each for shipping from New York to Boston, consignments of chewing gum containing undeclared phenolphthalein, a laxative drug. The greater part of this gum had previously been removed from the market by the Government, following an investigation of complaints of illness of Boston children after chewing the confection.

Standard Pharmaceutical Corp., Baltimore, Md., was fined a total of $70 on three actions brought by the Government for shipment of misbranded and adulterated pharmaceuticals. The company pleaded guilty to making seven shipments of pharmaceuticals which differed from the standards of strength, quality, and purity under which they were sold, and a Federal court imposed a fine of $10 for each consignment. The shipments consisted of tincture aconite root, fluid extract of ergot, fluid extract belladonna leaves, tincture belladonna, ointment of merucric nitrate, and fluid extract burdock root.

International Narcotic Meetings

Four meetings affecting commerce in international narcotics are held in Geneva, Switzerland, this month:—October 10, the supervisory body, created by the Narcotics Limitation Convention of 1931, meets to consider estimates of narcotics required to meet the medicinal needs of each country; October 25, the regular quarterly meeting of the Permanent Central Opium Board; October 30, the seventeenth session of the League of Nations Advisory Committee on Traffic in Opium and Other Dangerous Drugs; on a date as yet unannounced, the Council of the League meets as an electoral body to chose a new Permanent Central Opium Board.

The supervisory body, on October 10, establishes estimates of narcotic needs for 1934 and the exporting nations have agreed to refuse to permit greater shipments than those called for by these estimates. Herbert L. May, an American, is a member of this committee of four as delegate of the Permanent Central Opium Board.

This latter body meets October 25 to make its regular quarterly checkup of international narcotic shipments. It has been noted that differences between import and export figures are becoming less frequent, due to the work of this board.

The League of Nations Advisory Committee on Traffic in Opium and other Dangerous Drugs, meeting on October 30, is expected to give most of its attention to the allocation of narcotic needs which goes into effect in 1934, and will doubtless suggest forms for annual reports and estimates by the nations of the world.

The Council of the League meets some time during the month to hold the regular five-year election of members of the Permanent Central Opium Board. Hugh R. Wilson, United States Minister to Switzerland will sit with the Council in this election. Herbert L. May is the present American member of the Permanent Central Opium Board.

NRA Picks Ostlund and Garvan

H. J. Ostlund, University of Minnesota, and Francis P. Garvan, Chemical Foundation, have been appointed NRA advisers, the former on the wholesale drug trade and the latter on the chemical industry.

Standard for Oestrus Hormone

At the request of the officers of the Permanent Commission on Biological Standards of the Health Organization of the League of Nations, the Board of Trustees of the U. S. Pharmacopoeial Convention has agreed to assume the responsibility for distributing the International Standard for the Oestrus-Producing Hormone in the United States. Supplies of this material have just been received from the National Institute for Medical Research, London, where the International Standard has been prepared. This Standard is now available for the use of manufacturers of preparations of this Hormone, for the purpose of establishing for their products a uniform potency in the terms of the International Unit; one International unit consists of 0.0001 mgm. of the Hormone issued by the League of Nations. This material is also available for those carrying out important therapeutic researches in this field.

A memorandum suggesting the course to be followed in using the International Standard, has also been supplied by Dr. H. H. Dale, Director of the National Institute for Medical Research. Those who are interested in securing this memorandum or the International Standard, should communicate directly with E. Fullerton Cook, Chairman of the U. S. P. Committee of Revision, 43rd Street and Woodland Avenue, Philadelphia.

Drug Trade-Mark List

A list of trade names in use by member firms of the American Drug Manufacturers' Association and the American Pharmaceutical Manufacturers' Association has been prepared under the auspices of the Patent and Trade-Mark Committees of the respective groups.

The purpose of the compilation is to furnish information in the preliminary consideration of new trade names. It has been revised to September 1, 1933.

It is the desire of the Associations that the booklet receive the widest possible distribution not only among members but among all others interested in this important field, including firms and individuals identified with allied organizations, trade-mark attorneys and association trade-mark bureaus.

Copies may be obtained from Carson P. Frailey, Executive Vice-President and Secretary, American Drug Manufacturers' Association, Albee Building, Washington, D. C., or from Clarence W. Warner, Secretary, American Pharmaceutical Manufacturers' Association, care of The Maltbie Chemical Co., 246 High Street, Newark, New Jersey, at 25c each.

Facts - You - Should - Know

Artistry and Quality
- in -
Quince Seed Base Products

Fastidious women everywhere have become more or less acquainted with the fact that an artistic fingerwave should also be a quality wave.

The market is flooded with gum powder compounds which leave the hair sticky, powdery and dusty with the scalp in an unhealthy condition.

Quince Seed base hair waving lotions are distinctly superior products. They leave the hair soft and lustrous and are kind to the scalp.

POWCO BRAND Tested Persian Quince Seed gives you a maximum of clear mucilage—an economical basis upon which to produce a quality product.

Neutral Powdered Soaps
- and -
Your Dentifrices

It has been stated on reliable authority that of all the products that enter dentifrices, there is probably none that is as useful and desirable in a tooth paste or tooth powder as a **pure, mild** and **neutral** soap.

Not only has neutral soap value as a cleansing agent, but it has antiseptic value which gives the dentifrice a decided advantage. It absorbs the fatty substances without attacking the teeth and acts as a lubricant to the tooth brush. This reduces surface tension and allows less painful penetration of the interspaces.

In choosing the proper type of soap you must consider these points—color; taste; moisture content; mesh; titre; free sodium carbonate; alcohol residue; water residue and iodine value. In addition of course, the soap must contain no free alkali.

POWCO BRAND Neutral Powdered Soaps offer you a selective buying basis heretofore unavailable. Allow us to discuss your soap requirements with you and to suggest which one of our wide range of Neutral Powdered Soaps is best suited to your particular product.

The Advantages
- of -
Concentrated Shaving Cream Base

A finished shaving cream, to meet with consumer acceptance must embody certain features:—

It must produce a copious, lasting lather.

It must liberate a minimum of free alkali so that the skin will not become irritated.

It must contain a beard softening ingredient and must produce a lotion-soothing effect upon the skin.

It must be a **cream,** not a **dough,** and must remain soft and creamy in consistency after having been tubed and marketed.

POWCO BRAND Concentrated Shaving Cream Base affords the manufacturer a medium for readily and economically producing a finished cream meeting these requirements. This Base is manufactured from triple pressed stearic acid, refined edible oils and is superfatted.

This method of manufacturing cream enables the manufacturer to produce a quality product at low cost, eliminating a tremendous amount of labor and many difficulties attendant to manufacturing cream by the usual method.

JOHN POWELL & CO., Inc.
114 East 32nd Street, New York, N. Y.

Tested Quince Seed ● **Powdered Neutral Soaps** ● **Concentrated Shaving Cream Base**

Send For Samples and Detailed Information

Reference Cod Liver Oil

The U. S. P. Vitamin Advisory Board has just released the "Reference Cod Liver Oil" of known Vitamin potency for use in the standardization of Cod Liver Oil and other products containing Vitamins A and D. This "Reference Oil" has been assayed through a cooperative program including fifteen vitamin laboratories in which the International Standards for Vitamin A and Vitamin D were used as a basis of comparison. The potency of this "Reference Oil" has therefore been established upon the basis of International Units—and it is available for use in the standardization of all Vitamin A and Vitamin D products, both medicines and foods. The method of assay used in the determination of the potency of the "Reference Oil" is that proposed for adoption by "Interim Revision" for the U. S. P. X.

The original draft of the assay, as used by the laboratories participating in the preparation of this standard, is also available through the Chairman of the U. S. P. Committee of Revision. Within a short time this assay and the revised test for Cod Liver Oil to be established by "Interim Revision" will be officially announced. This Revision will establish the new Vitamin A and Vitamin D potency for official Cod Liver Oil.

The Standard "Reference Oil," of known vitamin potency, is supplied in 30 cc. packages. One lot of the Oil has been assayed for its Vitamin A potency, another lot for its Vitamin D activity. A nominal charge of $2.50 will be made for each 30cc. package. These may be secured in individual packages or in any larger number desired, by addressing the Chairman of the U. S. P. Committee of Revision at 43rd Street and Woodland Avenue, Philadelphia, Pa.

People

Kelly-Remington Medalist

Evander F. Kelly, secretary of the American Pharmaceutical Association, was presented with the Remington Medal on October 11 at the New York College of Pharmacy. The presentation, which followed a preliminary dinner, was made under the auspices of the New York branch of the American Pharmaceutical Association.

O'Malley Succeeds Adkins

Charles R. O'Malley, for the past two years secretary and treasurer of the Druggists' Supply Corp., New York, has now assumed full management of the corporation following the resignation of H. W. Adkins.

He was born in Madison, Wisc., May 26, 1902 and is a graduate of the University of Wisconsin. After several years of merchandising and sales work, he became a free lance in the development of retail merchandizing in the drug trade, serving the 122 wholesale druggists comprising the membership of the D. S. C.

Curry's Return

Mr. and Mrs. John Curry of Ogilvie Sisters, New York, returned September 20th, from an extended business and vacation trip on the west coast and Canada. The Currys have visited the outstanding accounts of the Ogilvie Sisters in an effort to further promote the Courtesy Hair Treatment campaign which is the advertising feature of the Ogilvie Sisters' national fall campaign.

Bloomfield Named Beecham Mgr.

Richard G. Bloomfield has been elected vice-president and general manager of Beecham's Pills, Inc., and of Yeast Vite, Inc., both of Niagara Falls, N. Y. He will also direct all of the Canadian activities of these companies and their affiliates.

H. L. Ross—Manager of Sparklets

Howard L. Ross, at one time president of J. Lesquendieu, Inc., and later vice-president of Dorothy Gray, both of New York, has been appointed general manager and director of the Sparklets Corp., that city.

Raymond Foster Retires

Raymond Foster has announced his retirement on January 1 after 46 years of association with the affairs of the Bayer Co. The offices he leaves are president, Cook Laboratories; president, Antidolor Co.; president, 3-In-One Oil Co.; president, Proprietary Agencies; vice-president, the Bayer Co.; vice-president, the Phillips Chemical Co.; member of the executive committee, Sterling Products, Inc. He was formerly president of the Winthrop Chemical Co. and a director of Metz Laboratories.

He joined the Bayer Co. in 1905 when it was first set up as a sales organization in this country and, when he had charge of the company under the Alien Property Custodian during the World War, started the company in the manufacturing business on its own.

Marks Quits Alcohol Inst.

Dr. Lewis H. Marks, for the past eight years executive secretary of the Industrial

Lewis H. Marks

Alcohol Institute, New York, has resigned from that position and it is reported that he will become associated with a large distilling concern.

Price—Asst. to Liggett

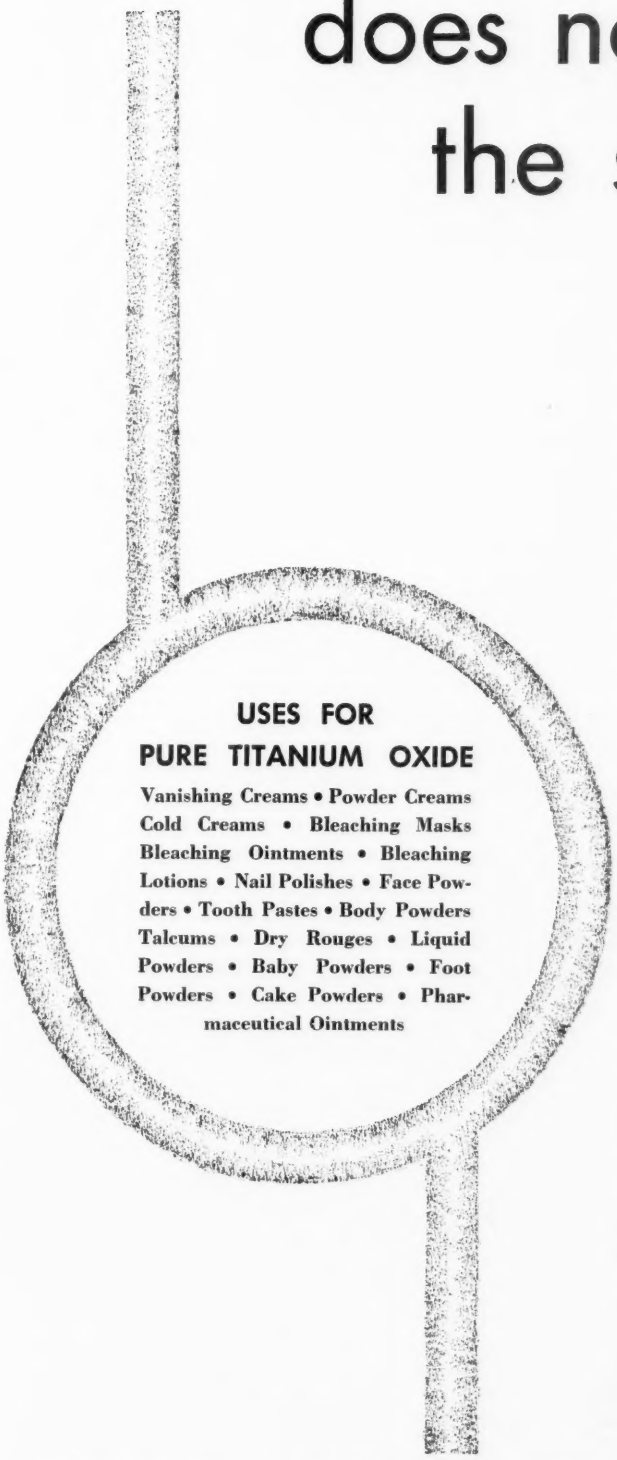
Harold E. Price has been appointed assistant to Louis K. Liggett, president of the United Drug Co., Boston.

Lauffer Joins Luft

Paul G. I. Lauffer, well-known in this field and recently chief chemist for Pinaud, Inc., New York, has become associated with George W. Luft Co., Long Island City, in a similar capacity. He will be in charge of general chemical control as well as directing its research.

Mr. and Mrs. Ellsworth Gale, 925 Woodland Ave., Plainfield, N. J., who are vacationing at "The Horizons", Bermuda. Mr. Gale is director of the Red Cross Division of Johnson & Johnson.

This finer, whiter pigment does not irritate the skin...



USES FOR PURE TITANIUM OXIDE

Vanishing Creams • Powder Creams Cold Creams • Bleaching Masks Bleaching Ointments • Bleaching Lotions • Nail Polishes • Face Powders • Tooth Pastes • Body Powders Talcums • Dry Rouges • Liquid Powders • Baby Powders • Foot Powders • Cake Powders • Pharmaceutical Ointments

● Pure Titanium Oxide has received the endorsement of an important group of cosmetic manufacturers who use this modern pigment in the formulation of superior products free from irritating effects. ● Because it is chemically inert, Pure Titanium Oxide will not produce unpleasant effects on the most sensitive skin. It will not react with other ingredients and cause chemical changes, rancidity or deterioration. This pure white pigment also has exceptionally fine particle size and high tinting strength. For this reason, only small amounts are required to produce desirable effects. It is unexcelled in covering power and adhesion. ● Pure Titanium Oxide is manufactured under strict laboratory control to assure a product of highest purity and uniformity. It has a definite place in improving the appearance, texture and color of a long list of products. ● It will pay you to investigate Pure Titanium Oxide and learn how it can improve your products.

TITANIUM PIGMENT CO., INC.

Manufacturers of TITANOX-B (Barium Base)
TITANOX-C (Calcium Base)... PURE TITANIUM OXIDE

111 Broadway, New York, N. Y.; Carondelet Station, St. Louis, Mo.; Pacific Coast Distributor: National Lead Co. of Calif., 2240 24th St., San Francisco, Calif.; Canadian Distributor: Wilson, Paterson, Gifford, Ltd., 101 Murray St., Montreal – 132 St. Helen's Ave., Toronto, Ont.

PURE TITANIUM OXIDE

N. A. R. D. Drops Henry

The National Association of Retail Druggists elected John W. Dargavel, secretary, succeeding Samuel C. Henry, at the annual convention held in Chicago, September 18 to 22. Although not re-elected, the latter was exonerated of charges directed against him during the past year. The executive committee reported that it felt no one man was responsible for the present financial condition, but rather that conditions are largely the result of antiquated constitution and by-laws.

Other officers elected are: president, Monte L. Powell, Denver; vice-presidents, C. L. Chichester, Georgia; George Bingham, New York; and Zach Kerrigan, Missouri; treasurer, Oscar Rennebohm, Wisconsin; members of the executive committee, Harvey A. Henry, Los Angeles, and George L. Secord, Chicago.

Krupp Heads F. W. D. A.

H. J. Krupp, Philadelphia, was elected president of the Federal Wholesale Druggists' Association at its eighteenth annual convention at the Stevens Hotel, Chicago, September 25 to 27. He succeeds O. J. Cloughly.

L. E. Seiberlich, New York was elected vice-president, succeeding H. J. Krupp. G. A. Raab, Baltimore, was re-elected treasurer. R. E. L. Williamson was re-elected secretary.

Cosmetic Exhibit in N. Y.

Many interesting exhibits featured the Twelfth Annual Exposition of Women's Arts and Industries, held at the Hotel Astor, New York, September 25 to 30. The Department of Health of the City of New York had an interesting exhibit prepared by Dr. Edward Bocker, showing the various raw materials entering into the manufacture of cosmetics.

Among the other exhibitors were Mary Chess, Conti Products Corp., Coty, Eversweet Products Corp., Ogilvie Sisters, Roger & Gallet, Helena Rubenstein, and Colgate-Palmolive-Peet.

Lilly Advances Ruedig

Dale Ruedig, who has been associated with Eli Lilly & Co. for more than 14 years, has been appointed sales manager of the company's newly created Southwestern Division.

Companies

McKesson in New York

McKesson & Robbins, Inc., has leased additional space in New York at 155 E. 44 st. Headquarters of the company in New York will continue at 79 Cliff st., the leasing of additional space being an expansion move in anticipation of large scale activity in the distribution of wines and distilled spirits.

United Drug Directors

Charles Francis Adams, former Secretary of the Navy and treasurer of Harvard College, was elected today to the directorate of the new United Drug Company at a special meeting of the board of directors here. James L. Richards, Frederick E. Snow and Eugene W. Stetson of New York also were added to the board. The elections fill vacancies caused by resignations.

All four new directors were also elected to the executive board of United Drug.

Vitamin A in Cough Syrup

Smith Bros., Poughkeepsie, N. Y., has obtained the exclusive rights to primary vitamin A in the cough syrup and cough drop field, and has added the substance to its cough syrup and cough drops.

This primary vitamin A, is produced as carotene by the S. M. A. Corp., Cleveland, Ohio. Up to September, 1932, carotene was available only for research purposes in very small quantities. The S. M. A. Corp. is now producing it in sufficient quantities and at a sufficiently low cost as to make it commercially available.

Healthox Laboratories Formed

Healthox Laboratories has been established in Baltimore to manufacture cosmetics. J. Leon Kahn is manager.

Peek & Velsor Appoint Tirrell

Peek & Velsor, Inc., New York, has appointed Parker L. Tirrell, Boston, as New England representative.

Modess Corp. Formed

Modess Corp. has been formed with headquarters in New York to handle the marketing of "Modess" sanitary napkins. Although the corporation will have no connection with Johnson & Johnson, New Brunswick, former owner of the rights to "Modess," the policies of the latter will in large measure be continued.

Officers of the new company are: president and general manager, Thomas E. Hicks, former vice-president of Johnson & Johnson; vice-president, William G. Martens, formerly in charge of "Modess" sales for Johnson & Johnson; secretary and treasurer, Frank A. Cosgrove; assistant treasurer, Gerald Poole.

Hatch Opens N. Y. Office

C. F. Hatch Co., Lowell, Mass., creator of distinctive packages, has announced the opening of a New York office at 122 E. 42st., that city.

Harvey T. Warren, formerly with the Waterbury Paper Box Co., and well

Harvey T. Warren

known among drug and cosmetic manufacturers in the New York territory, has become associated with the Hatch company as New York representative.

Ipana Troubadours Return

Bristol-Myers, Inc., has brought the "Ipana Troubadours" back to radio listeners after an absence of more than three years. The program is solely in the interest of "Ipana" toothpaste.

Artcote Papers in Chicago

Artcote Papers, Inc., of Irvington, N. J., manufacturers of non-tarnishing and rub-proof gold, silver and copper metallic papers, announces the opening of its Midwestern sales office at 1103 Merchandise Mart, Chicago.

General Electric Plastics

General Electric Co., West Lynn, Mass., has published a new price list and data booklet which describes the three types of plastic materials manufactured by the company and the different grades of each. It also contains complete information of interest to the buyer of plastic materials.

Naugatuck Appoints Jelly

Naugatuck Chemical Co., New York, has appinted Walter H. Jelly & Co., Chicago, as Middle West representative.

Bond Mfg. in Chicago

Bond Manufacturing Corp., Wilmington, Del., has announced the opening of a Chicago office at 120 South La Salle st., in charge of George A. Knight.

Colgate Appoints Dunk

Howard W. Dunk, former director of premium and institutional promotion for Nestle Milk Products, Inc., has been named to a similar post with Colgate-Palmolive-Peet Company.

Some say: "A penny squeezed is a penny earned."

Well, maybe.

But look around at the penny-squeezers, and see if they are rated Aa---A1.

Not many.

Squeezing and scrimping on what you buy is not in itself a means to success.

What's more to the point is to put in an extra penny's worth of value, so that you can take out a fair and satisfactory profit.

We sell perfume oils that live up to the conditions in the paragraph just above.

Seek out the same class of merchant for everything you purchase, and your customers will act like a permanent "*Buy Now*" campaign.

This month's ideas

Chinoise . . . . . a new odor, with more life than you thought likely, more tenacity than you need and less cost than you expect. For perfume and powder. Two grades.

Perliné . . . . . a novelty with a character many people like. For cream and perfume. Also a special one for powder. Very low-priced.

Gardenia 16 . . . a smart, French-type, all-purpose gardenia. Sixteen dollars a pound.

Send for samples

van Ameringen-Haebler, Inc.

Manufacturers and Importers of

Aromatic Essentials

Flavor Materials, Aromatic Chemicals
Essential Oils, Perfume Specialties

315 FOURTH AVENUE, NEW YORK

180 North Wacker Drive, Chicago 438 W. 48th Street, Los Angeles 42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Edwin Seebach Forms Company

Edwin Seebach Co., New York, has been organized to handle aromatics, essential oils and perfume specialties. The company will represent Chemical Works Flora, Dubendorf-Zurich, Switzerland; Aussel, Fils Golfe-Juan, France, essential oils; and Misitano, Messina, citrus oils.

Crystal Corp. Sponsors Flight

The Crystal Corp., New York, has sponsored a flight by Viola Gentry and Mary Samsom in an attempt to break the Woman's Refueling Endurance Flight Record in a Curtiss-Thrush plane called "Outdoor Girl."

Pinaud Appoints Morris

Pinaud, Inc., New York, has announced that Ralph R. Morris, formerly with the Armand Co., has been placed in charge of its Chicago and Mid-West territories as Mid-West manager, succeeding L. W. Olson, who has been appointed New York representative.

Stein Cosmetics Directors

Stein Cosmetics Co. has elected the following directors:—F. J. Stoltz, J. N. Watson, V. Schoenborn, A. Alexander, and F. R. Williams. Officers elected were:—president, F. J. Stoltz, and secretary-treasurer, J. N. Watson.

Florasynth Gets Account

Florasynth Laboratories, Inc., New York, has been appointed United States representative for Schmoller & Bompard, Grasse, France, essential oils.

Semler to Sell Cosmetics

R. B. Semler, Inc., New York, "Kreml," has been appointed sales representative for Lengyel Freres' "Extrait Imperial Russe."

Paris Medicine Demands NRA Mediums

Paris Medicine Co., St. Louis, Mo., has announced that it will cancel its advertising in all publications not NRA by November 1.

Princess Pat Joins A. N. A.

Princess Pat, Ltd., Chicago, has been elected to membership in the Association of National Advertisers, Inc. Mrs. M. M. Gordon, president of the company, will represent it in the A. N. A.

Luxor on Air

Luxor, Ltd., Chicago, has started a new radio campaign over the National Broadcasting Co. network featuring "Talkie Picture Time." The program is broadcast every Sunday evening from 5.30 to 6.00 P. M., E. S. T.

Removals

A. C. MEYER & CO.

A. C. Meyer & Co., Baltimore, proprietaries, has announced its removal to 118 Hopkins place, that city.

PAUL M. WAGNER

Paul M. Wagner, Dallas, chemist and manufacturers' agent, who represents Givaudan-Delawanna, Inc., Interstate Color Co., and John Powell & Co. in that territory, has announced the removal of his offices to 715 Praetorian building, that city.

L. K. LIGGETT CO.

Trustees of the Louis K. Liggett Co. have announced the removal of that company's general offices to 2 Park ave., New York.

New Products

Norwich Cod Liver Oil Tablets

Norwich Pharmacal Co., Norwich, N. Y., has introduced a new product, "Norwich Cod Liver Oil Concentrate Tablets." The company guarantees each tablet to contain not less than 1,000 vitamin A units and not less than 500 vitamin D units. It is offered in bottles of 100 tablets and retails for 75 cents.

Ellis Laboratories' Alsal

Ellis Laboratories, Chicago, is marketing a new product, "Alsal," which is recommended for foot ailments of all types.

Chase Williams' Melzo

Chase Williams Corp., New York, has introduced a new product, "Melzo," which is referred to as a balanced food containing all the vitamins and also important enzymes essential to proper digestive and intestinal activity. It is said to be nearly 50 per cent. banana concentrate having in addition maltose dextrin and yeast.

Synthetic Aromatic Code

Manufacturers of synthetic aromatic chemicals held a meteing Octoner 13 in the Chemists' Club, New York, to discuss and prepare a code supplemental to the basic industry code of the Chemical Alliance. The meeting was called by Charles A. Mace, secretary of the Synthetic Organic Chemical Manufacturers, who has been assisting the code-making deliberations of the several divisions of the synthetic chemical manufacturers.

A. D. M. A. to Meet at White Sulphur

American Drug Manufacturers' Association will hold its 1934 convention at the Greenbrier, White Sulphur Springs, West Virginia, the week beginning April 16.

Obituaries

Wallace E. McCaw

Wallace E. McCaw, former vice-president, Colgate-Palmolive-Peet Co., died at Lake George, N. Y., October 4, aged 62.

William F. Wagner

William F. Wagner, secretary, McKesson-Vogeler Drug Co., Cincinnati, died at his home in that city, October 2, aged 74.

D. F. Jones

D. F. Jones, well-known in this industry, died in Detroit on September 21. He was purchasing agent for Frederick Stearns & Co., Detroit, and had been associated with the firm for many years.

George B. Evans

George B. Evans, originator of the "Mum" deodorant which later was sold toBristol-Myers Co., and president of George B. Evans Co., Philadelphia, manufacturer of "Ney," a liquid deodorant, died in Bideford Pool, Me., at the age of 75.

Robert B. Whittlesey

Robert B. Whittlesey, president and general manager, McKesson-Whittlesey Co., New Haven, died at his home in Hamden, Conn., September 27, aged 38. He had been a member of the firm of Charles W. Whittlesey Wholesale Drug Co. from 1919 until it was merged with the McKesson-Robbins Co., when he became president of the subsidiary.

George A. Kelly

George A. Kelly, 3rd, vice-president of George A. Kelly Co., Pittsburgh, wholesalers, was instantly killed, October 9, as the result of an automobile accident while driving to White Sulphur Springs, W. Va. His wife, who was accompanying him, died the following day, as the result of injuries sustained in the accident.

Woods A. Caperton

Woods A. Caperton, formerly sales manager, Eli Lilly & Co., Indianapolis, died at his home in that city October 10, aged 42. He had retired from active business in July, 1932, after thirty years of association with the company, the last twenty years of which he had been sales manager.

In 1902 he entered the employ of Eli Lilly & Co., after some years in the retail drug business, as Texas representative. In 1906, he went to the home office as assistant sales manager and in 1912 was promoted to the position of sales manager.

Individualized Perfumes for COSMETICS

The most satisfactory cosmetics are those perfumed with due consideration to the individual properties of each cosmetic . . . "custom-made" perfumes, they might be called, because they are made specifically for each preparation . . . Fritzsche Brothers' service will ascertain what perfumes will be most satisfactory for your cosmetics and then prepare an individualized perfume for it. Send for special literature and prices.

● POWDERS
Chypre
Gardenia
Jasmine
Eastern Bouquet

● CREAMS
Wistaria New
Apple Blossom
Orange Blossom
Nile Lily

● LOTIONS
Fougere
Lavender
Orchid
Cucumber

● HAIR PREPARATIONS
In addition to the standard perfumes, we have added to this group a few new unusual types.

FRITZSCHE BROTHERS INC.

Proprietors of
PARFUMERIES DE SEILLANS
Seillans, France
118 W. Ohio Street
Chicago

78-84 BEEKMAN ST.,
NEW YORK, N. Y.

Sole Agents in U. S. and Canada for
SCHIMMEL & COMPANY
Miltitz (near Leipzig) Germany
FRITZSCHE BROS. of Canada, Ltd.
77-79 Jarvis Street, Toronto

Harry A. Stebbins

Harry A. Stebbins, assistant manager of the New York office of Merck & Co., died suddenly of a heart attack in Chicago on Oct. 14. Mr. Stebbins was in attendence at the Merck exhibit at the Century of Progress while in Chicago.

Mr. Stebbins, who was 57 years old, had been with Powers-Weightman-Rosengarten since 1890, being manager of the New York office of that company up to the time of the merger of Powers-Weightman with Merck & Co. He was a member of the American Pharmaceutical Association, Drug & Chemical Section of N. Y. Board of Trade, N. Y. College of Pharmacy, Bedford Lodge of F. & A. M., and the Drug & Chemical Club (N. Y.)

Funeral services at Mr. Stebbins home in Brooklyn on Oct. 17 were attended by his host of friends in the drug and chemical trade. Interment was in Greenwood Cemetery, Brooklyn.

Louis Belcher

Louis Belcher, who represented W. J. Bush & Co., Inc., for eleven years, died in Baltimore on Oct. 6. Mr. Belcher represented Bush in England for many years and had many friends both there and in Baltimore.

Financial

Industry's Stocks Sag

Prices of common stocks of drug and cosmetics concerns have sagged a little during the past month, according to the stock price indexes of the Standard Statistics Co., New York. A comparison of the drug stocks index with the index for 351 industrials over recent weeks, follows:

		(1926 average equals 100)	
		Drugs and Cosmetics	351 Industrials
1933			
Sept.	6	79.5	81.5
	13	76.4	83.9
	20	81.2	82.8
	27	76.4	74.5
Oct.	4	78.0	79.1
1933	High	99.7	86.6
	Low	53.9	38.7
1932	High	88.3	61.6
	Low	45.0	31.9

Dow Retiring Bonds

The Dow Chemical Co. has notified holders of its six per cent sinking fund gold notes due February 1, 1940, that it will purchase $500,000 principal amount of the notes at prices not to exceed 101½ and accrued interest, the offer expiring November 10 or earlier if the amount is tendered. There were $2,835,000 of the notes outstanding as of May 31, 1933.

Earnings & Dividends

BOURJOIS, INC.

Bourjois, Inc., has resumed dividends on its common stock with the declaration of a 50 cent per share distribution payable October 10 to stock of record September 30. The last dividend paid was 25 cents on June 15 last year.

COTY, INC.

Coty, Inc., reported a net income of $218,372 for the six months ended June 30, after all charges including Federal income taxes. This was equal to 14 cents a share on 1,537,435 capital shares and compared with $311,973, or 20 cents a share for the corresponding period last year. The net for the quarter ended June 30 was $95,963, or 6 cents a share, after all charges, comparing with $122,409, or 8 cents a share in the preceding quarter and with $129,180, or 8 cents a share in the June quarter last year.

MACANDREWS & FORBES

MacAndrews & Forbes Co. has increased its quarterly dividend on the common stock to 50 cents a share payable October 14 to stock of record September 30. The last payment was 40 cents a share July 15 at which time it was raised from 25 cents a share, which last named quarterly rate had been in effect since July, 1932.

PARIS MEDICINE CO.

Paris Medicine Co., St. Louis, Mo., has declared a third quarterly dividend of 100 per cent.

SHARP & DOHME

Sharp & Dohme, Inc., has declared a dividend of 50 cents a share on the class A cumulative convertible preference stock for the current quarter and also a dividend of $1 a share covering accumulations. The two dividends are payable November 1 to holders of record October 17. Three months ago the company paid the same amount against arrears. With the payment of the additional $1.50 a share on November 4 there will remain only 25 cents in accumulated dividends yet to be paid.

VADSCO SALES

Vadsco Sales Corp. reports for six months ended June 30: Net loss after taxes, depreciation and other charges, $135,828, contrasted with net profit of $59,105, equal to $1.21 a share on 48,629 shares of 7 per cent. preferred stock, last year. Quarter ended June 30: Net loss after same charges, $59,446, compared with $76,382 loss in preceding quarter and $24,009 loss in second quarter of last year.

A. M. A. Accepts

LIVER CONCENTRATE-SQUIBB

Autolyzed Liver Concentrate-Squibb—A mixture containing autolyzed liver concentrate 88 per cent., and cocoa 12 per cent. Each gram is derived from approximately 7 Gm. of fresh liver and represents the antianemic potency of from 20 to 30 Gm. of fresh mammalian liver.

Actions and Uses—Autolyzed liver concentrate-Squibb supplies the antianemic potency of liver in a form that is palatable and convenient. The product is also rich in vitamin B. and G.

Dosage—Four to six or more teaspoonfuls in divided doses daily for a period of ten days; thereafter a maintenance dose of one to two teaspoonfuls daily is usually sufficient.

Manufactured by E. R. Squibb & Sons, New York, by license of the University of Pittsburgh Medical School. U. S. patent applied for. No U. S. Trade-mark.

Fresh edible livers which have been chilled immediately on removal from the body, are ground and mixed with fiftieth-normal hydrochloric acid. Sufficient chloroform is added to act as a preservative and prevent bacterial growth. The mixture is incubated at 37 C. and autolysis allowed to proceed from five to ten days. The solution is then filtered to remove any undigested material; the filtrate which contains the active material is desiccated at a lower temperature in vacuo, and the resulting mass ground to a fine powder. Twelve per cent. cocoa is added as flavoring. Each gram of the finished product represents the antianemic potency of from 20 to 30 Gm. of fresh mammalian liver.

A. M. A. Rejects

HORSFORD'S ACID PHOSPHATE

Horsford's Acid Phosphate, manufactured by Rumford Chemical Works, Rumford, R. I., because it is an unscientific mixture of unproved usefulness marketed with unwarranted therapeutic claims and in such a way as to tend to its ill advised use by the public.

EDWENIL

Edwenil, marketed by Spicer & Co., Glendale, Calif., because it is apparently an unscientific preparation of semisecret composition (rules 1, 2 and 10), marketed under an uninformative name (rule 8) with unwarranted and possibly dangerous therapeutic claims (rule 6).

Trade Literature

Solvents

British Industrial Solvents, Ltd., London, has published a 42-page booklet describing the products of its manufacture, together with complete specifications.

Pyrethrum

John Powell & Co., Inc., New York, has issued the second edition of its interesting booklet, "Pyrethrum Pointers." The object of this booklet is to make available a summary of the important aspects of pyrethrum. The new edition includes discussions of rotenone, vaporizers, odorless extracts, etc.

Collapsible Tubes

White Metal Manufacturing Co., Hoboken, N. J., has published a new booklet entitled, "Collapsible Tubes and Bottle Sprinklers." The booklet is not only a catalog of tube potentialities, but also a manual of interesting information for users of collapsible tubes, sprinkler tops, and other specialties.

1 pound of PINEALCO yields 20 pints of

TRADE MARK REG. U. S. PAT. OFF.

SYRUP OF WHITE PINE COMPOUND, N. F.

NOT generally known, perhaps surprising, is the fact that there are from 2 to 12 different grades or species of every crude drug in commercial demand. And, correspondingly, from 2 to 12 different prices. In making an effective Syrup of White Pine Compound it is scarcely possible, therefore, for one lot to match another in color and therapeutic value—UNLESS you are sure of getting consistently the highest quality crude drugs.

In PINEALCO (Hopkins) you have a ready-made N. F. Soluble Solid Extract, sure in therapeutic value, uniform every time in color, odor and flavor. The same high quality ingredients are used in making PINEALCO every time.

PINEALCO is so highly concentrated that a single pound will yield 20 pints of Syrup of White Pine Compound, N. F.

Packed in 5, 10, 25 and 50 lb. tins.

Write for our prices and check against your present costs.

TEST SAMPLES and the FAMOUS PINEALCO FORMULA on REQUEST.

MEMBER NRA U.S. WE DO OUR PART

J.L.HOPKINS & COMPANY 220 Broadway NEW YORK

Compare this fine . . .

AMERICAN LANOLIN

Chemists who know Lanolin are insisting today that it be practically odorless, colorless and of a fine, firm body. They are insisting too that the refining process used remove all traces of asphaltum and other impurities.

B-W Lanolin is an American made product, manufactured by a new, improved method of refining which guarantees a fine, uniform quality. Many chemists and buyers of leading drug and cosmetic manufacturers now insist on B-W Lanolin.

NRA MEMBER U.S. WE DO OUR PART

May we send you a sample?

BOPF-WHITTAM CORPORATION

SALES OFFICE
EMPIRE STATE BLDG.
NEW YORK, N. Y.

First American Manufacturer of
Refined Lanolin, Hydrous and Anhydrous
. . Established 1914 . .

MAIN OFFICE
and PLANT
WESTFIELD, N. J.

Raw Material Markets

Chemicals
Drugs

Menthol Unsettled

Menthol is in a particularly unsettled condition. Replacement costs are lower but orders are being filled from arrivals bought when the market in Japan was much higher. In spite of this fact there has been a marked drop in spot quotations, cases being offered at $2.75 per pound. The market was given little buying support at this limit. Seasonable demand, when it gets well under way is expected to relieve the situation somewhat but with futures offered at lower levels it is difficult to interest buyers at present.

The new crop in Japan is reported very good. The Southern harvest is all in with a very satisfactory yield. The Northern crop will be completely gathered during the next few weeks and indications here also point to a good yield.

Camphor Up Again

Spot camphor prices were again advanced. Japanese refined slabs sold at from 49c to 50c per pound, powder at from 50c to 51c and tablets at from 56c to 57c. Both slabs and powder experienced an exceptionally heavy demand from the consuming trade during late trading. The new price level was well maintained by both the current demand here and the cost to replace in the primary.

The United States received more camphor from Japan during the first six months of 1933 than in the same period of 1932. The 1933 receipts amounted to 5,647 kin valued at 928,507 yen as compared to 5,590 kin valued at 790,050 for the 1932 period. Total shipments of camphor from Japan to all countries amounted to 12,406 kin in 1932 as compared to 15,492 kin for the first six months of 1933.

Tartaric Acid Higher

Domestic producers of tartaric acid advanced quotations during the past month. Granular or powder in barrels was offered at 25c per pound and in kegs at 25½c. Crystal in barrels was 25½c per pound. These prices are f.o.b. New York with the usual advance of ½c per pound for Chicago or St. Louis delivery. Prices were also for prompt shipment only, no contracts being entered. The advance was more or less expected as the spread between domestic and foreign material was recently widened considerably.

Essential Oils
Medicinal Oils

Prices and Imports

Indicative of unsettled conditions during September, several important price changes occurred after indexes for that month had been calculated and charted. September figures given below have been corrected for these late movements.

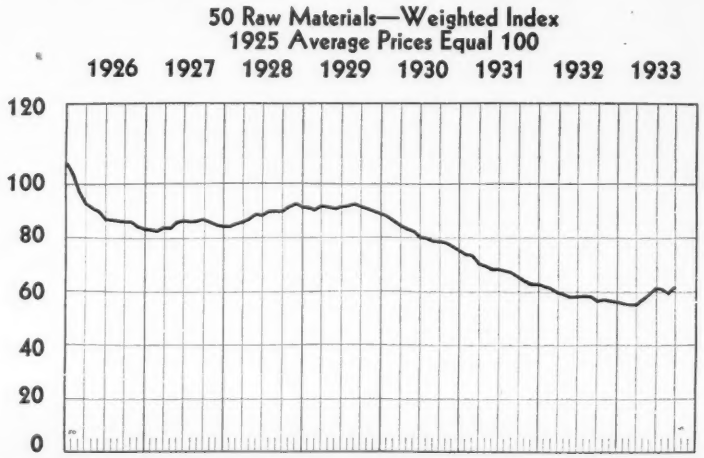
Prices of 50 raw materials in October rose to 60.7 compared with the revised September figure of 59.4. The latter, in turn, marked a decline of 1.1 points from the August index.

Medicinal chemicals rose to 64.4 from the revised 63.5 in September. Barbital, iodine and morphine declined while potassium bromide increased in price at the end of September while cod-liver oil, cream of tartar, iodine (exchange fluctuation), mercury and quinine sulfate sold at higher prices in October. Menthol declined.

The botanical index moved very little, from 70.9 in September to 70.8 in October. Agar declined late in September, resulting in a change in the index for that month. In October belladonna, digitalis, ergot and rhubarb increases were balanced by the decline in gentian.

General prices for essential oils were quite strong, the index for October rising 2.5 points to 49.5. Not only is this the high for the year, but it also represents an average increase of more than 25 per cent. in the prices of essential oils over the low point of 39.1 in February. Price increases were registered by anise, bergamot, bois de rose, canaga, cassia, cloves, eucalyptus, lavender, lemon, rose and sandalwood. Peppermint continued weak and showed the only decline among the selected items.

Import indexes are corrected for seasonal variation.



Natural Products
Flavors

Mineral Oil Quiet

Buying of mineral oil was slowed down somewhat after the recent price advance as buyers adjusted themselves to the new schedule. During late trading, however, indications were to the effect that the adjustment period had been passed and the new price levels generally accepted. Demand improved. As the new contract season approaches there is still some uncertainty as to length of time suppliers will be willing to commit themselves. Uncertainty as to currency and other factors make it improbable that contracts will be written for a long period. Prices were well maintained in all respects.

Seidlitz Mixture Up

Seidlitz mixture was also advanced 1c per pound to the basis of 10¾c in barrels. In 100 pound kegs the price was ½c per pound above this figure. The development was in line with advances in raw material costs. Demand along steady lines.

Lactic Acid Firmer

Owing to the prevailing price of raw material replacement costs of lactic acid were well maintained and the item took on a firmer aspect. A very good movement of this commodity was noted at from 55c to 57c per pound for U. S. P. X and from 53c to 55c for U. S. P. VIII.

Terpin Hydrate Advanced

A further advance featured the market for terpin hydrate. Prices ranged from 41c to 42c per pound the advance being based on cost to replace.

Why so many leading cold-cream manufacturers USE

BEEHIVE BRAND BEESWAX

First, because Beehive Brand Beeswax is pure—the finest that money can buy. In many cases, a smaller amount is used in the cream than is required of ordinary beeswax, and with better results.

Our own buyers select the finest grade of crude beeswax. It is critically examined at the source and again carefully tested for purity and quality by our chemists. Beehive Brand is then sun-and-air bleached—a method that is slower and more costly but infinitely better than ordinary chemical bleaching. This work is done by and under the direction of veterans, many with more than 45 years of service.

Specify Beehive Brand for your next order of beeswax.

WILL & BAUMER CANDLE CO., Inc.
Syracuse, New York Est. 1855

SPERMACETI CERESINE
GLYCERINE STEARIC ACID RED OIL

Smaller Cosmetic Manufacturers

NRA MEMBER U.S. WE DO OUR PART

Purchase your raw materials from a source which is specially prepared to serve you now as later, when your demands have increased. We are prepared to furnish you with the same high quality materials as those used by the larger manufacturer. Furthermore, we offer you a continuity of service well equipped to take care of all your requirements and give you the benefit of lower prices, as these requirements become larger. For meeting your smaller needs we offer:

		Price per lb.
Beeswax, U. S. P., Sunbleached discs.	5 lbs.	42c
Super Cocoa Butter, odorless.....	5 lbs.	50c
Ceresin, best white imported.....	5 lbs.	45c
Cosmetics Ochre, for Rachels.....	1 lb.	$1
Gum Paragon, for Waveset.....	5 lbs.	50c
Lanolin, U. S. P., anhydrous.....	5 lbs.	35c
Magnesium Carbonate, U. S. P.....	5 lbs.	20c
Stearic Acid, triple pressed.....	5 lbs.	25c
Spermaceti.....	5 lbs.	35c
Talc, best Italian.....	10 lbs.	12c
Titanium Dioxide, pure.....	5 lbs.	40c
	10 lbs.	35c
Zinc Stearate, U. S. P.....	5 lbs.	40c
Zinc Oxide, U. S. P.....	5 lbs.	30c
	10 lbs.	25c

All quotations f. o. b. N. Y. Full list of materials on request.

R. F. REVSON CO.
91 Seventh Avenue New York
Specializing in
Chemicals for the Cosmetic Industry

WEST COAST REPRESENTATIVE
J. W. LESER & CO., 1001 E. First St., Los Angeles, Ca'lf.

U. S. P.

ZINC OXIDE

. . . . . by the pioneer manufacturer of zinc products . . . . . .

THE NEW JERSEY ZINC COMPANY
160 FRONT STREET, NEW YORK

Chicago Cleveland San Francisco

MYSORE GOVERNMENT Sandalwood Oil

Distilled from
Santalum Album

INSIST ON ORIGINAL CANS AND CASES

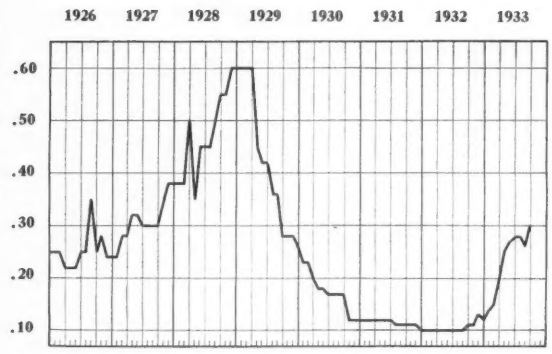
Agents for the United States and Canada

W. J. BUSH & CO.
(Incorporated)
Essential Oils
New York

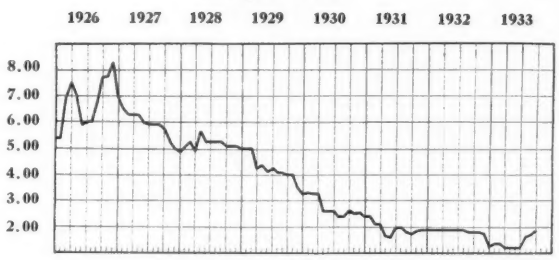
Chicago National City, Calif. Montreal

Prices Continue Upward

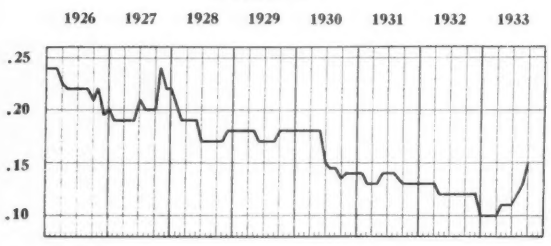
Digitalis Leaves



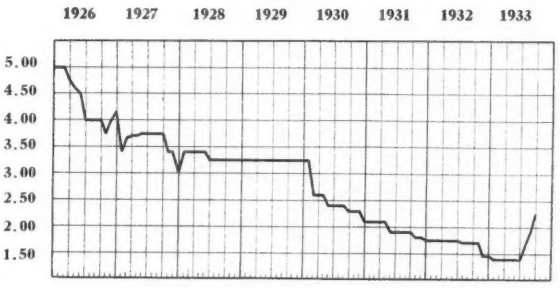
Bergamot Oil



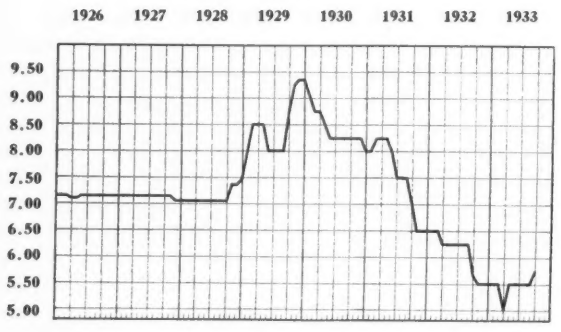
Belladonna



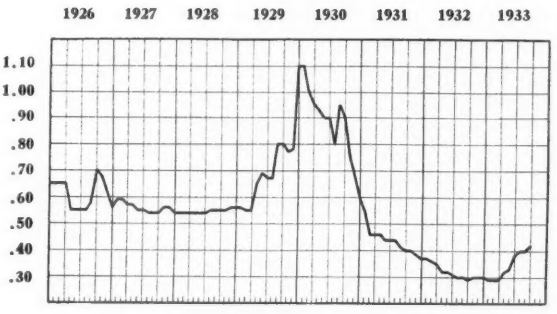
Lavender Oil



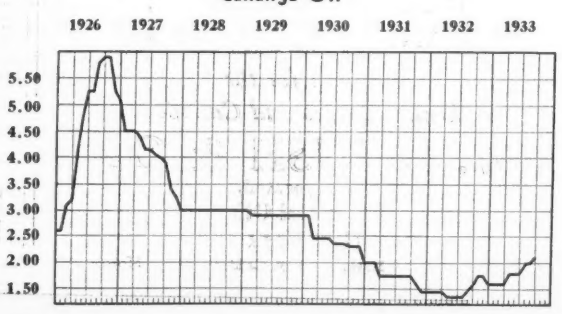
Sandalwood Oil E. I.



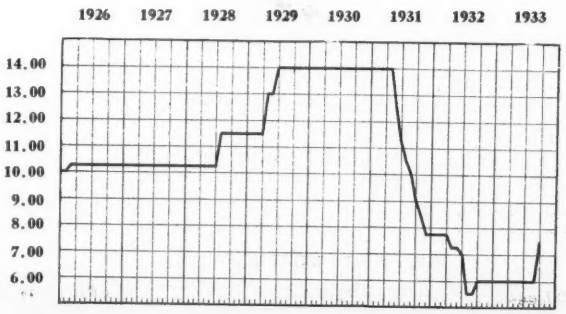
Anise Oil



Cananga Oil



Rose Oil



STANCO DISTRIBUTORS, Inc.

MANUFACTURERS OF

PHARMACEUTICAL and COSMETIC WHITE OILS and PETROLATUMS

WHITE OILS, U. S. P.

HEAVY-LIGHT

We manufacture and offer the highest grades of U.S.P. White Oils obtainable. They are absolutely odorless, tasteless and colorless.

Our list of these oils covers a wide range of viscosities and a wide range of gravities.

Any Viscosity ..... From 50 to 345 Saybolt @ 100° F.
Any Gravity ..... From .820 to .900

MARCOL **WYROL** **PRIMOL**

Brand names which are a guarantee of finest quality.

These oils have for years set the standard for the best in White Oils. PRIMOL for Pharmaceutical purposes and MARCOL and WYROL for COSMETIC and TOILET Preparations are used throughout the world by the manufacturers of the finest preparations.

WHITE OILS, INDUSTRIAL

HEAVY-LIGHT

A similar wide range of viscosities and gravities is offered in our list of colorless Industrial White Oils. Any viscosity or gravity in the above range is available.

In the general manufacture of cosmetic and toilet preparations these White Oils find widespread use. An outstanding value is offered in the popular brand:

BAYOL

Saybolt viscosity @ 100° F.	80/90
Specific gravity	.845/.855

PETROLATUMS, U. S. P.

	Melting Point A. S. T. M.
Snow White Parmo No. 1	125/129° F.
Snow White Parmo No. 2	115/120
Lily White Parmo	115/120
Ex. Light Amber Parmo	115/120
Amber Parmo	115/120

Parmo is our brand name for Petrolatum and is very well known to pharmaceutical, cosmetic and toilet preparation manufacturers, having a well established reputation over a long period of years for quality and uniformity.

All products are guaranteed as to quality and uniformity. Specific information and experimental samples furnished on inquiry. Our technical staff will be pleased to assist you in your problems.

STANCO DISTRIBUTORS, Inc.

2 PARK AVENUE, NEW YORK, N. Y.

Plant, Bayway, N. J. **Warehouse, Chicago, Ill.**

Cod Liver Oil Firm

High Norwegian exchange rates kept the replacement market for cod liver oil in a firm position. Renewal of demand for shipment parcels also added strength to the primary source of supply. Substantial quantities of this year's production has already been sold and exported. The spot position reflected this condition and also the increase in consumer request for medicinal purposes as the larger consuming season approaches. The spot prices were raised with the inside at $27.00 per barrel with importers of some brands quoting $30.00.

The production of cod liver oil in Norway during the second quarter of 1933, together with figures for the corresponding periods of the preceding years are as follows:

Second Quarter of	*Steamed Medicinal Cod liver oil gals.*	*Liver of Codfish and other oils gals.*
1933	570,500	137,200
1932	766,700	278,100
1931	610,000	142,400
1930	741,000	140,600
1932	768,200	163,500

The exports during the second quarter of this year, as against the corresponding periods of the three preceding years, were as follows:

Cod Liver Oil	*Second quarter of 1933* Gallons*	*1932 Gallons*
Steamed medicinal	395,000	474,300
Crude medicinal	15,000	13,200
Pale industrial	250,600	300,200
Light-brown industrial	283,900	395,800
Brown industrial	23,400	12,700

Cod Liver Oil	*Second quarter of 1931 Gallons*	*1930 Gallons*
Steamed medicinal	358,000	439,700
Crude medicinal	18,600	9,700
Pale industrial	126,800	201,200
Light-brown industrial	261,300	320,000
Brown industrial	22,000	24,200

*The figures for the 2nd quarter of 1933 are provisional.

Exports to the United States from Bergen and Aalesund show a marked increase in comparison with the exports of the corresponding period of 1932, according to invoices certified at the United States Consulate at Bergen during the second quarter of 1933. Exports of steamed and crude medicinal cod liver oil, poultry and veterinary cod liver oil increased from 343,261 gallons (valued $155,531) in the second quarter of 1932 to 383,424 gallons (value $197,970) for the corresponding period of 1933.

The most important markets for Norwegian cod liver oil are the United States, Great Britain, Germany, and Italy. (Exports to the United States and Italy have increased, while decreases are noted for other countries). As steamed medicinal cod liver oil plays the most important part in the Norwegian cod liver oil industry, statistics as to exportation of this oil for the months of April and May 1933 and preceding years are quoted below:

Country	*April-May 1933 Gallons*	*April-May 1932 Gallons*	*April-May 1931 Gallons*
United States	141,800	131,200	76,800
Great Britain	79,000	94,300	116,000
Germany	24,800	40,400	20,900
Italy	7,800	3,100	2,100
Holland	7,600	16,500	12,100
France	1,600	4,200	2,600

After the poor results of the Lofoten fisheries this year, the price of steamed medicinal cod liver oil rose from 54 kroner per barrel in the beginning of March to 95 kroner in the latter part of June. Although the Finnmark fisheries showed fair results, this was not sufficient to stop the upward movement. The main cause for this considerable increase in price, however, is attributed to the large and growing demand for cod liver oil from foreign countries, especially the United States, and to the difficulty of Norwegian manufacturers to fill all orders on account of the limited quantity of raw material available. (United States Consulate, Bergen).

Unrevised statistics of exports from Newfoundland indicate a decrease in shipments abroad of cod liver oil to 41,128 imperial gallons for the period August 1 to August 25, 1933, from 58,700 gallons for a like period of 1932. For the same period in 1933 common cod oil shipments increased to 37,834 imperial gallons, from 22,514 gallons in 1932. The following is extracted from the weekly Herald and Newfoundland Trade Review of August 26, 1933, regarding cod liver and common cod oil: "Practically none of last year's cod liver oil remains on hand. Inquiries from Great Britain are being received, and great interest is centered upon the possible development of this new market. Markets show some inclination to buy cod oil, and purchases have been made at $50 per ton, delivered St. John's. This figure shows an increase of $5 over last season's value. Stocks of last season's manufacture have been disposed of."

Alcohol Moving Freely

The outlook for alcohol is very promising. Increased consumption lies just ahead and preparations for deliveries to the anti-freeze jobbers is well under way. Considerable interest is also shown in ethyl alcohol with indications pointing to a decided improvement in consumption as soon as the Eighteenth Amendment is repealed. Under these conditions the price structure in all respects is very firm.

Quotations now prevailing on the principal formula are as follows:

	Carloads drums	*Single Drum Price*
No. 1 spec	.335	.415
No. 5 comp	.34	.42
23 A spec	.37	.49
39 B spec	.38	.50
40 M spec	.34	.46

Prices quoted are f. o. b. works.

Benzoic Acid Higher

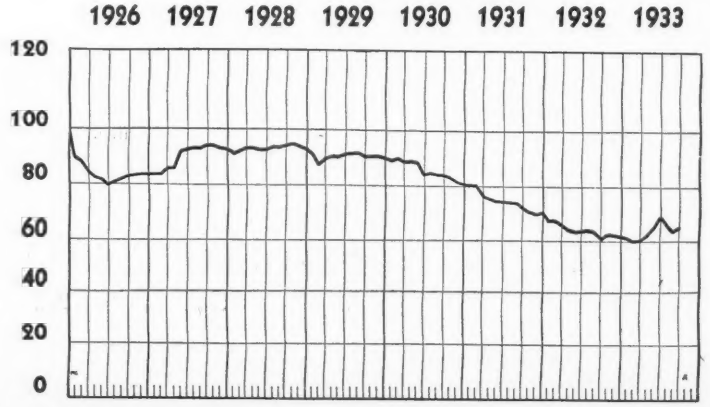
Benzoic acid was advanced by leading producers. In 100 pound barrels the price was 55c per pound for U. S. P. crystals, 25 pound kegs 60c. Prices were for spot delivery or on contract over six months. Demand was quite active and well up to recent volume. Increased production costs accounted for the advance.

Sodium benzoate U. S. P. granular or powder was up to from 47c to 52c per pound as to quantity taken. This was in line with the increased cost to produce this item. Prices were for spot delivery or on contract for a six months period.

Rochelle Salt Up

Rochelle salt advanced 1c per pound in late trading. Powder in barrels was 12½c per pound and crystals 13½c. Prices f.o.b. New York. The new and higher prices continued in a firm position and a very good movement tended to keep undertones steady and values tending upward in line with the situation prevailing on the raw material.

15 Medicinal Chemicals—Weighted Index
1925 Average Prices Equal 100



The NEW . . .
ISDAHL PROCESS·

Four of the ten producing plants of Isdahl & Co.

Cod Liver Oil *with higher vitamin potency*

Vitamin experts have long known the injurious effect which exposure to air has on Vitamin A potency.

To avoid all contact with air, to prevent the devastating effect of oxidation on Vitamin A during refining, Isdahl & Co. have perfected a new process—the vacuum process—which preserves to the fullest degree known the potency of Vitamin A.

Ten Isdahl producing plants are now equipped to operate under the new process. They are sending to America the finest medicinal Cod Liver Oil yet produced, with a potency of Vitamin A uniformly maintained at a higher content than ever before known in Cod Liver Oil.

A sample will be forwarded on request.

ISDAHL & CO. A/S
BERGEN NORWAY

McKesson & Robbins, Inc.
79 CLIFF ST., NEW YORK, N. Y.

Cream of Tartar Higher

Producers of cream of tartar advanced prices during the past month and now quote powder or granular in 5 barrel lots or over at 17½c per pound. Less than 5 barrel lots are 17¾c per pound. Crystals were 1c per pound above these figures. Prices are f.o.b. New York with the usual advance of ½c per pound for Chicago and St. Louis delivery. Prompt shipment only—no contracts.

Mercury Advances

Mercury advanced again to from $66 to $67 per flask. This commodity has been consistently strong for a long time now. The price is largely influenced by higher quotations for the imported goods. There has been very little domestic production and stocks have not increased much as present prices are said to be still too low to permit American mines to operate. The situation is characterized as firm but quiet.

Producers of mercurials report a steady demand and firmer price undertones but no open price changes. In view of steadily increased cost to produce this group is being closely watched.

Glycerin Firm

A firm to strong market prevailed in glycerin without open price change having developed. The various factors that have kept this item in its firm position for several months is expected sooner or later to result in an advance for all kinds of glycerin. Spot price was 10¼c per pound.

Quinine Up Sharply

Several advances were noted in quinine salts. Sulfate and bisulfate were up to 48c per ounce in 100 ounce tins. Hydrobromide was also advanced to 62c per ounce. Quotations were for spot delivery only—no contracts. The movement placed these items more in line with prevailing replacement costs.

Bromoform Strong

Higher prices for bromoform would not come as a surprise to the spot market. The upward tendency of production costs have not as yet been fully reflected in this item. Openly quotations continued unchanged at from $1.75 to $1.90 per pound.

Orange Oil Advanced

An advance of 10c per pound in the spot price of California orange oil was the feature of the citrus oil market. This development gave further strength to the group as a whole, and placed the domestic oil more in line with values for the imported grades. There were no other open price changes but the situation as a whole was one of strength.

Exports of American orange oil for the first six months of 1933 were nil as compared with 11,200 pounds valued at $17,100 for the same period of 1932.

Geranium Oil Firm

Price schedules for oil geranium were unchanged during the past trading period but the market is particularly firm in undertone in keeping with the general tendency of all floral oils. There was an absence of unsettlement in the primary market and a good demand on spot.

Artificial Mustard Up

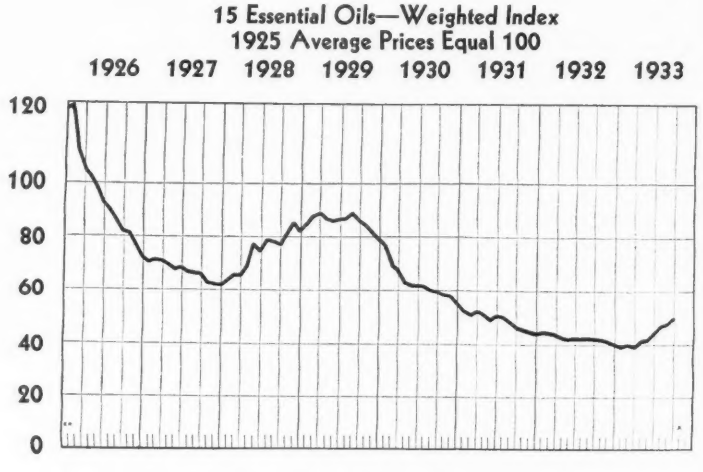
Spot quotations on artificial mustard oil have been marked up to $1.75 to $1.85 per pound as a result of the current high level of import costs. Demand was characterized as fair but irregular. The U. S. P. oil was without change.

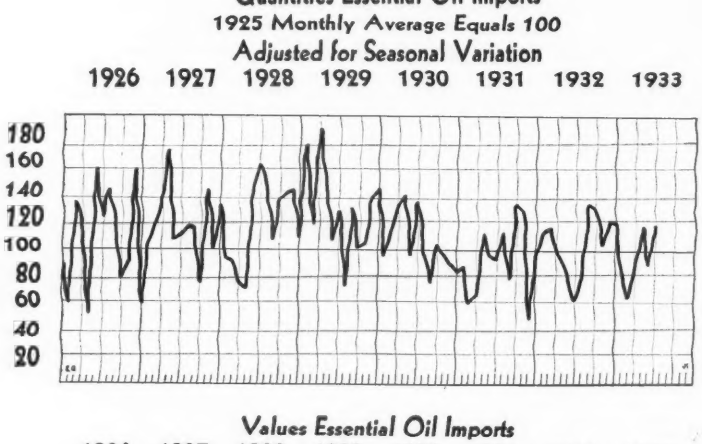
Angelica Oil Higher

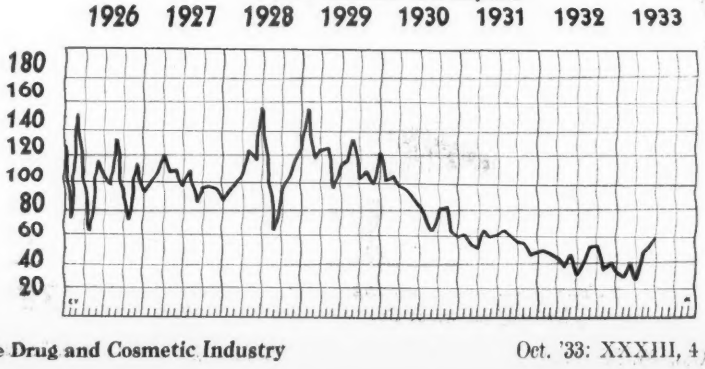
Owing to sharp advances in crude material, some sellers of angelica root oil raised prices to the basis of $32 per pound. There has been a good demand for this item and present spot stocks are badly depleted. Prices on seed oil have been withdrawn entirely by one of the leading factors in this item.

Calamus Oil Advanced

Oil calamus advanced to from $3.00 to $3.25 per pound during recent trading. This price was said to be fully warranted by prices already paid for replacement stocks.







NRA MEMBER U.S. WE DO OUR PART

Made from American Lemons

by the Exchange Lemon Products Company of Corona, California. Backed by the Sunkist group of 13,200 citrus growers—largest in the world. Immediate shipments from warehouse stocks in New York, Chicago, Philadelphia and St. Louis. For prices on kegs, barrels or carloads, consult any of the following distributors:

DISTRIBUTED EAST OF THE ROCKIES BY

Mallinckrodt CHEMICAL WORKS
St. Louis Philadelphia
New York Chicago

J. T. BAKER CHEMICAL COMPANY
Phillipsburg
New Jersey

DODGE & OLCOTT COMPANY,
180 Varick Street,
New York City

NEW YORK QUININE & CHEMICAL WORKS
101 North 11th Street
Brooklyn, New York

SWANN CHEMICAL COMPANY,
Birmingham,
Alabama

THE HARSHAW CHEMICAL COMPANY,
Cleveland, Ohio

PACIFIC COAST SERVED BY

Products Department CALIFORNIA FRUIT GROWERS EXCHANGE, Ontario, California

Lemon Oil Firm

California lemon oil is quite firm in price at 75c per pound. An unusually large volume of business was transacted in this item during recent trading as a price advance is generally anticipated. Domestic orange oil has already advanced and this development drew attention to lemon with the result that buyers for consumption seemed anxious to cover long range requirements.

The tendency of Italian oil was to advance based on the import position although this oil moved in limited quantities. Prices ranged from $1.15 to $1.30 for the better known brands.

Lemon oil production in Sicily this year has been very meager, owing to a reduction of citrate of lime production all over Sicily. It is reported by the trade that less than 50% of the usual quantities of lemon oil has been available for sale. There have been little, if any, price benefits, by virtue of lack of demand in both Europe and the United States. An accurate production estimate is difficult, as the bulk of the oil is manufactured by thousands of small, widely scattered farmers. However, it is stated that at least 75 per cent. of all the lemon oil produced during the season has been exported. It is understood that the present price for sponge essence is 5 lire per Sicilian pound of 317 grams, whereas machine-pressed essence is 4 lire per Sicilian pound. Statistics just published by the Bank of Sicily indicate that shipments of Sicilian lemon oil to all parts of the world during the calendar year 1932 totaled 3,548 quintals of 220.46 pounds each valued at 10,821,000 lire (the lire equals $.0513 each). Great Britain was the destination of 42 per cent. of the total amount exported, the United States, France and Germany were the next best customers, taking 17, 14 and 11 per cent. of the total exports. (Consul Alfred T. Nester, Palermo).

Lime Oil Steady

Local dealers in lime oil are adhering to full schedules on this commodity. The price for replacement is firm and a larger consuming demand is expected to develop with repeal of the 18th Amendment. Some manufacturers have already made plans to increase output.

During 1932 the United States imported 38,671 pounds of lime oil with a declared value of $221,000. The West Indies is the source of these imports. In a recent report Vice Consul Alfredo L. Demorest (Trinidad, W. W. I.), stated that the estimated production in Trinidad for September and October should amount to around 3,700 pounds. Total Trinidad exports for August equaled 276 pounds. The price prevailing September 15 was $5.50 per pound.

Bergamot Oil Strong

Although there has been very little interest in oil bergamot, demand being confined mostly to small users, the situation is one of much strength. The higher figures asked on spot, namely $1.85 to $2.00, is a direct result of the primary market position and the increased prices asked for shipment material.

Bergamot oil shows an even firmer tone than lemon oil, justified by small stocks, and the coming crop, estimated at 30 per cent. of normal, reports Consul Ernest E. Evans, Naples. Prices, which showed a certain firmness at the beginning of the month (8 to 8.50 lire per Sicilian pound), rose to 9.50 lire at the end of the first week, 11 lire at the end of the second week, and reached 12.50 lire during the course of the first week in September. The tendency is still upward, and the market optimistic. A royal Decree of June 15, 1933, recently published, which orders the closing up of "Ente Magazine Generali del Bergamotto" (Bergamat Consortium) in Reggio Calabria and the liquidation of all pending activities, would seem definitely to exclude any possibility of a repeal of free trade in bergamot oil. There is under consideration a proposal that the Government oblige cafes, dance halls, cinemas, and theaters to use old stocks of bergamot oil owned by the Government, mixed with terpene of lemon and orange, as an insecticide and general disinfecting material, in place of petroleum products of foreign manufacture at present in general use. Bergamot oil was exported to the United States in amount of 2,500 pounds ($3,157) for the first 26 days of August 1933.

Spearmint Oil Quiet

Very little current interest is noted for oil spearmint. The past month has seen lower prices ranging from $1.10 to $1.30 per pound. At these levels, however, the undertones have become firmer with dealers hesitating to offer freely in large quantities in view of the general tendency of the oils as a whole.

Peppermint Oil Firmer

Oil peppermint was somewhat firmer during late trading, both on spot and in the primary market. The market has reacted from the lowest levels reached during the past month and holders now await a resumption of buying along lines more normal for this time of year. It was the uncertainty prevailing as to price trend that kept the market quiet from a consumer request standpoint.

The range of prices quoted for natural oil was from $2.30 to $2.70 per pound as to seller and quantity with redistilled ranging from $2.60 to $3.00. The market seems to be in a better position as regards price improvement than prevailed for some weeks back.

The quantity of American peppermint oil exported during the first six months of this year exceeded slightly those of 1932, but the declared value was nearly 50 per cent. greater.

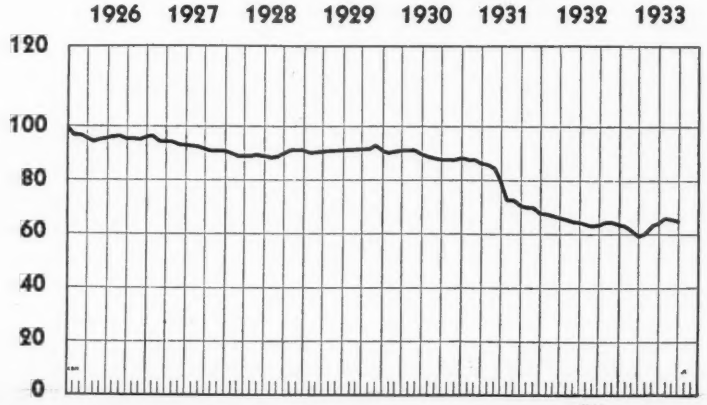
1931		1932		1933	
Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
99,530	$205,700	120,000	$198,200	123,300	$277,300

Canadian statistics of imports of peppermint oil for the three month period April-June 1933 indicate an increase of 25 per cent. in quantity and 66 per cent. in value. There is a marked decline in receipts from United Kingdom, but an increase in the trade with the United States of 75 per cent. in quantity and over 100 per cent. in value.

Lavender Oil Up Sharply

Oil lavender is the feature of strength in a generally strong essential oil market. Spot prices have been advanced sharply with the range as to quality and seller being from $2.25 to $4.25 per pound. This year's crop is generally agreed to be a failure—it being said that production will not be more than one-third of normal. Failure of the cultivation projects has turned manufacturers back to their original source of supply, the wild flowers. The quantity brought in was not large and conditions made for higher cost of the flowers.

25 Cosmetic Raw Materials—Unweighted Index
1925 Average Prices Equal 100



SALICYLATES

SALICYLIC ACID **SODIUM SALICYLATE**

ACETYL SALICYLIC ACID

METHYL SALICYLATE **MINOR SALICYLATES**

FORMALDEHYDE

PARA FORMALDEHYDE

HEXAMETHYLENETETRAMINE

Benzoate of Soda
Benzoic Acid
Benzaldehyde
Benzyl Chloride

Guaiacol
Calcium Guaiacol Sulphonate
Potassium Guaiacol Sulphonate

Bromides
Silver Salts
Creosote
Creosote Carbonate
Glycerophosphates

factories
GARFIELD, N.J.
PERTH AMBOY, N.J.

HEYDEN
CHEMICAL CORPORATION
50 UNION SQUARE
NEW YORK

180
N. WACKER DR.
CHICAGO, ILL.

Gum Arabic Firm

Based on cables from abroad, the general tone of the gum arabic market is much healthier and more confidence is felt in the trade there. On spot prices continued firm and without open change. Amber sorts sold at from 8c to 8½c per pound although the movement for current requirements was somewhat restricted.

The total arrivals of gum at all markets in Kordofan during May amounted to 51,954 kantars, and the total arrivals at El-Obeid amounted to 33,271 kantars. The demand from abroad was very satisfactory and large sales took place, especially to the United States. Prices (c.i.f.) improved from 28/3 to 31/-for the cleaned gum. The general tone of the market was much better. It is expected that arrivals will be smaller during the coming months than hitherto, and if this should prove the case it will assist in moving stocks out of the country. During May 1933 approximately 2,000 tons of gums valued at 44,000 Egyptian pounds were exported. The United States, Great Britain, Germany, Italy, Belgium, Austria, Spain and Netherlands were the principal countries of destination. (Commercial Attache Office, Cairo.

Angelica Root Strong

Angelica root is an item of unusual interest in the spot market. Prices have been steadily increasing here. The imported root is very scarce and from 35c to 50c per pound is asked. A good part of the foreign crop is said to have been sold to interests outside of the drug trade. Makers of cordials generally prefer the imported root but it is said that those not already covered will be forced to use the domestic material. Domestic root sold at from 24c to 26c, factors in this grade of material taking a very optimistic outlook due to developments in the situation.

Psyllium Up Slightly

French psyllium seed was advanced fractionally during the past month and the disposition was to push the item further but the presence of large stocks in this market acted as a brake on such movement. Prices ranged from 11½c to 16c as to quality and quantity. The blond seed was without open change.

Cloves Up Slightly

Recent gain in the primary position and an increase in consumer request on spot raised the price of Zanzibar cloves to 11c and 11½c per pound.

Linden Flowers Up

Linden flowers without leaves were higher at 17c and 18c with sellers reserved in view of replacement costs. Flowers with leaves continued to sell at from 11c to 15c.

Belladonna Firmly Held

Local sellers were reserved in their offerings of belladonna leaves in view of much higher cables for shipment. Quotations ranged from 15c to 18c per pound. Root was also higher at from 13c to 15c.

Ergot Firmer

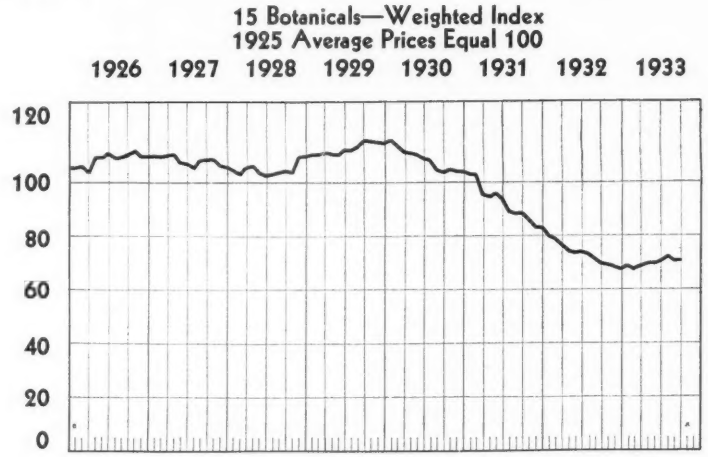
With a short supply of Spanish and Portuguese ergot assumed the whole market took on a firmer tone. The general opinion expressed was that considerably more would have to be paid later on. Spanish material ranged from 40c to 47c per pound. Russian Polish ranged from 33c to 35c per pound.

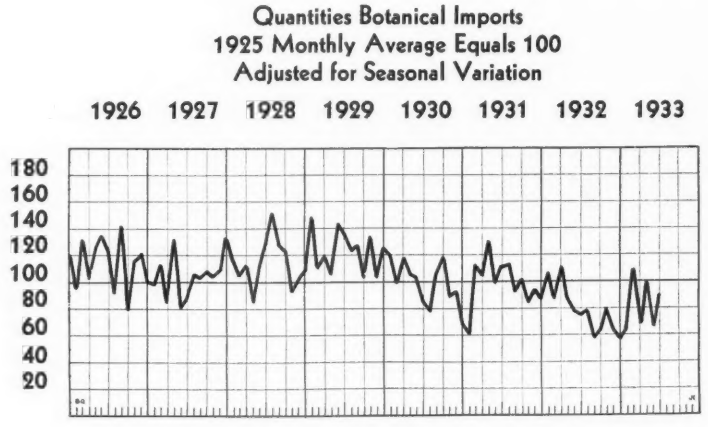
Digitalis Strong

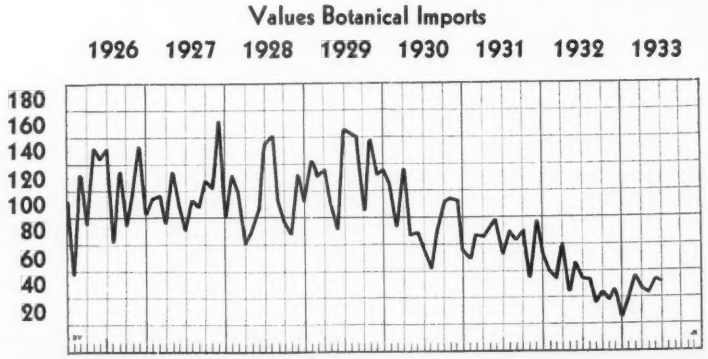
The price advance of digitalis to from 30c to 32c per pound was reported as fully warranted by replacement cost of this item. Foreign shippers were strong in their views reporting light stocks and the slightly better exchange position had little effect on prices.

Arnica Flowers Firm

Arnica flowers on spot reflected the well supported primary market position. Cost to import made it necessary for local factors to ask from 14c to 15c per pound, being an advance of 2c during the past month. Demand was moderate.







FLAG BRAND
WHITE OILS

VISCOSITY---*Our U. S. P. medicinal oils have an exceptionally high viscosity.*

COLD TEST---*Extremely low cold tests on our technical oils---as low as 40° below zero, Fahrenheit.*

• • •

U. S. P. MEDICINAL: Genuine Russian Imported White Oils.

COLD CREAM OILS: All grades for cosmetic purposes.

TECHNICAL OILS: Viscosity range 75-400, Textile Oils, White Oils for mineral oil emulsions, Refrigerator Oils.

Stocks carried in New York Warehouse. *Direct shipment from Refinery to all American ports.*

• • •

S. SCHWABACHER & CO., Inc.
59 PEARL STREET NEW YORK, N. Y.
Telephone: WHitehall 4-5367

SHERKA

NRA MEMBER U.S. WE DO OUR PART

CAMPHOR
SYNTHETIC
MADE FROM AMERICAN TURPENTINE

Menthol Crystals
SYNTHETIC

Thymol, U. S. P.
PRIME WHITE CRYSTALS

Terpin Hydrate, C. P.

Urethane, U. S. P.

Urea
CHEMICALLY PURE • TECHNICALLY PURE

PRODUCTS OF SCHERING-KAHLBAUM, A. G., BERLIN

SHERKA CHEMICAL CO. INC.
75 WEST STREET · NEW YORK
TELEPHONE · BOWLING GREEN 9-7482

Choosing a Trade-Mark

(*Continued from page 329*)

character or quality. The purpose of a trade-mark is not to describe your product, but to identify your brand or make of that product. If the term chosen describes your goods, it may apply equally well to a similar product made by anyone else. Not only can no technical trade-mark rights be established in it, but the good will which you might build up among your customers would be susceptible of easy diversion to another product similarly described.

There is a distinction, however, between a descriptive term or mark and one which is merely suggestive. The term "Rain Water Crystals" on a water softening compound is obviously suggestive of the softening effect of its use, but is not, of course, a literal description of the product or its quality. This distinction has been particularly important to the manufacturer of so-called "ethical" drug products. If you wish to get your product approved by the American Medical Association, under the rules of its Council on Pharmacy and Chemistry the trade name or mark on your pharmaceutical preparation or mixture "must be so framed as to indicate clearly the most potent ingredients." It is often a delicate matter to find a satisfactory middle ground between the requirements of the Association and the prohibitions of the Trade-mark Act.

3. Keep away from identical or similar trade-marks already established on other goods. This is wise whether the other goods are similar to your own product or not. The courts have many times held that, since trade-marks are intended primarily to indicate origin, no trade-mark should be registered if the public is likely to believe that the product bearing it comes from some other than the real producer of it. Try to have your mark as different as possible, both in sound and in appearance, from any trade-mark of which you already know. For the same reason, avoid a word which is already used as the essential feature of the corporate name of an established business.

4. Choose a name that is easy to remember and to pronounce. It may be a composite or coined word, as unusual as you like, but keep it simple. You want your purchasers to be sure they are asking for your product. An awkward or unfamiliar word is hard to carry in the mind, and many a diffident customer in a crowded store will hesitate to struggle with it or to risk the embarrassment of a public correction by the clerk. Moreover, if the customer gets the name wrong, the clerk may fail to understand what he means and may give him something else instead.

5. If it is practicable to do so, couple your word mark with a distinctive design. People who forget words may carry pictures in their minds. It is effective to use a design expressing the idea conveyed by the words. We all recall the brown dromedary in connection with a Camel cigarette, and the smiling brown face and red bandana of "Aunt Jemima" on pancake flour. But such a relationship between the design and the word is not essential. We also could recognize, without seeing any name, the pair of sleek heads in the red triangle on the Vitalis label, or the green wreath which appears on Kolynos tooth paste.

6. Unless there is a special and excellent commercial reason for doing so, don't use a personal name as a trade-mark. Such a name must be written in a distinctive way (or be coupled with a portrait of the individual whose name is used) to be registrable, and at best it is hard to protect. The signature of Dr. Fletcher on Castoria helps to identify the genuine product, and we look for the signature on Dorothy Gray cosmetics; but with the greatest care that anyone can take litigation may still be necessary if someone of the same or a closely similar name comes along as a competitor. The famous litigation over the use of the name Waterman on fountain pens is a striking example of what can happen when prestige and good will have been built up around a personal name as a trade-mark. The courts are very reluctant to interfere with anyone's use of his own name in his business; and though your competitor may be required to distinguish his goods, such requirements are not, as a rule, found to work out very satisfactorily.

7. Perhaps you already have an established business name which stands for integrity and quality to the public. If you do, see if you can't work out a trade-mark which will link your new product to the business name that already has a valuable good will. John Wyeth & Brother Incorporated have a valued line of pharmaceutical products under trade-marks beginning with "Wy--." The Lord & Taylor department store has taken advantage of its reputation by putting the trade-mark "Lortay" on the goods which it sponsors; and R. H. Macy & Co. has cleverly linked the ideas of quality and origin in the mark "Supre-macy" on its special lines of merchandise.

8. When you have finally selected a trade-mark, but before you begin to use it, it is advisable to make an effort to learn whether that mark or a closely similar one is already in use, even though you may never have heard of it. A search of registered marks on similar goods in the Patent Office is not expensive, and you may consider its cost as partial insurance on the cost of your labels and packages and the continuing value of your advertising. Furthermore, since a trade-mark may be in use without being registered, check up in your trade circulars and journals too, and see whether you find a similar product listed under your chosen mark or one that resembles it.

Such investigations will not guarantee that the field is clear for your chosen mark. As long as we do not have compulsory registration of trade-marks which are in use, there is a possibility that, in spite of your precautions, you may later hear of a like mark used in a small business or in a limited way before your use began. That does not happen very often, however, and if you have followed the rules about choice and have made a careful search for other marks, you ought to have a trade-mark that will grow more and more valuable to you.

STEARATES

ZINC STEARATE
CALCIUM STEARATE
ALUMINUM STEARATE
MAGNESIUM STEARATE

Stearate of Magnesia
Light. Great Adhesiveness. Pure White. Immeasurable Fineness. Heavy if desired. Dusts out under the puff like the finest pollen

Stearate of Zinc
Odorless. Impalpable. Pure White. Water Resisting. Great Adhesiveness. Light or Heavy as desired.

We are manufacturing the foregoing on a large scale. Deliveries in any quantity from one barrel to a carload. Prompt shipments.

STOCKS CARRIED: Chicago, St. Louis, San Francisco, Los Angeles, Kansas City, Mo., Des Moines, New Orleans

FRANKS CHEMICAL PRODUCTS CO., INC.
55—33RD STREET BROOKLYN, N.Y.
BUSH TERMINAL BLDG. NO. 9

Levissima
MAGNESIA OXIDE
U. S. P.
REGD. TRADE MARK.
for

MILK of MAGNESIA

You recognize a superlative grade of Milk of Magnesia by its smooth texture, fine suspension, pleasant taste, excellent color and uniformity. All of these qualities may be easily obtained in your Milk of Magnesia through the use of "Pattison's" LEVISSIMA, Oxide of Magnesia, U.S.P. Its extremely fine particle size, intense whiteness, physical and chemical purity, and chemical reactivity make it particularly suitable for the manufacture of the finest quality Milk of Magnesia . Send for samples and prices.

Also Magnesium Carbonate, U. S. P. and Technical, powder and blocks, and Magnesium Hydrate, Pharmaceutical.

SCHOFIELD-DONALD CO., INC.
154 Nassau St. New York

Books - OF IMPORTANCE TO DRUG AND COSMETIC MANUFACTURERS

Chemistry of Essential Oils and Artificial Perfumes (Parry) Vol. I	$12.00
Vol. II	8.00
Cosmetics (Koller)	3.50
Perfumes and Cosmetics (Askinson)	6.00
Perfumes, Cosmetics, and Soaps (Poucher) Fourth Edition Vol. I	6.50
Vol. II	9.00
Preparation of Perfumes and Cosmetics (Durvelle)	$8.00
Pharmaceutical Recipe Book	5.00
Remington's Practice of Pharmacy	10.00
Scientific American Cyclopedia of Formulas	5.50
Twentieth Century Book of Recipes, Formulas and Processes	4.00
U. S. Dispensatory XXI	15.00

The Drug and Cosmetic Industry

101 WEST 31st STREET ... NEW YORK CITY

Please remit with order — Consult our Book Dept.

Readers' Questions

(*Continued from page 338*)

Stick Deodorant

We are interested in manufacturing a stick deodorant. Can you furnish us with a formula? Milwaukee.

Experiment with the following formula. You are concerned here with the making of a base which will carry the active agents and rub off easily without crumbling or crackling and secondly you are concerned with suitable active agents which will at once inhibit and deodorize perspiration. Alum is a good, if harsh, astringent. Aluminum chloride is both an astringent and a deodorant. Oxyquinoline sulphate is an astringent, a deodorant and also a powerful antiseptic. You can adjust the following proportions as experience dictates:

Alum	4 grams.
Aluminum chloride	5. "
Oxyquinoline sulphate	1. "
Petrolatum	3. "
Talc	20. "
Precipitated chalk	30. "
Perfume	1. "
Starch	5. "
Tragacanth mucilage 10%	10. "
Zinc oxide	20. "
	100.

Dissolve the alum and aluminum chloride in sufficient water to effect solution. Add this to the chalk and allow to dry. Dissolve the oxyquinoline in water and rub up in the same way with some of the talc. Mix the starch, tragacanth mucilage and melted petrolatum. Then mix the dry materials, add the binder and compress the sticks. Wax can also be used as a binder. If it is desired to pour the sticks into moulds it seems practical to suggest that the stick should consist of either a wax or a soap base.

Grinding Roots

We are grinding derris root for use in our insecticide. But we have had a lot of trouble with our labor force because the dust from the pulverizer is exceedingly irritating. Is there any way we can overcome this? New York.

Yes. Inasmuch as you haven't given us the name of your pulverizer we are going to assume that it is one of the high speed hammer types commonly used for crude drug grinding. We refer you to the Management Forum of THE DRUG AND COSMETIC INDUSTRY for September in which Mr. Chilson suggests a method of handling noxious dry materials without dust. You can also mount the pulverizer on a steel bin provided with air vents covered with unbleached muslin. You will have to experiment with the air vents to get the right size otherwise you will build up an air pressure within the bin that will shoot the dust through the seams or you will create a back pressure that will cause a kick back through the machine. The pulverizer should be mounted on top of this bin in such a way that the discharge port is entirely sealed within the bin. The bin must have doors so that the pulverized material can be taken away. Some companies discharge directly into barrels; others use portable bin trucks inside the bin.

Perfume Sprayer

We should like very much to have the address of the manufacturer of the electrical hand perfume sprayer mentioned in the February issue of THE DRUG AND COSMETIC INDUSTRY in Management Forum.

The address of the manufacturer is being sent to you direct. Indifferent results were secured by experimenters who tried this sprayer because they overlooked the simple fact that, any blower, regardless of how it is operated, must emit a more or less powerful stream of air which would blow the powder all over the room unless restrained with a cloth trap. The practice of those who have found the method convenient is to cover the mixer with an unbleached muslin cover and to attach the sprayer so that spraying is continuous while the mixer is in operation.

Trade-Mark Rights

We are having trouble with one of the large pharmaceutical houses over a trade-mark which they claim they registered six months prior to us. But we have been using that trade-mark for six years and had it on the market long before they did. What are our rights in this matter?

Naturally your competitor will try to bluff you out of your claim if you let him get away with it. The fact that they registered first makes no difference legally. The right to a given trade-mark depends upon priority in *use*. And the law does not make it compulsory to register a trade-mark. If you are able to prove that you used the mark first you will win the case. Often cases like this are lost because the original user of the trade-mark is unable to produce dated records showing the use of the mark at a specific time. Nowadays manufacturers putting out new products distribute a few packages by registered mail to correspondents in different states. These packages are returned and held. Dated invoices and price lists showing the name of the product are useful in establishing priority in use.

Label Claims

We have been marketing a cough remedy for forty years and never got into trouble because of claims we made for it. But lately a lot of our stuff was picked up and condemned and we have been having considerable difficulty with the Department on this account. How can we find out what claims we can make?

It would pay you to retain a consulting medical director to advise with you along these lines and we shall be glad to put you into touch with one if you so desire. However, the Department is the court of last resort and its decisions are in the public interest and are usually based upon ample precedent. So the best thing is to engage someone who is in touch with the Department on such matters to rewrite your package and advertising copy and then submit it for approval.

Depilatory Cream

We have been working for months on a depilatory cream but have produced nothing which gives satisfactory results without causing irritation. Can you help us out on this? Los Angeles.

We think it can be said that there are few satisfactory depilatory pastes, even fewer perhaps than powders. We don't know of any which is not irritating when used injudiciously. After all the depilatory must dissolve hair, which is somewhat similar in composition to the skin, so that what will attack one is likely to attack both. Some experimenters advocate protecting the skin first with an application of sulphonated oil and others favor the use of a local anaesthetic like a 5% phenol solution. It would appear however that the cream itself might be made to contain a soothing agent and it is upon this premise that the following formula is based:

Titanium dioxide	15. grams
Barium sulphide	37. "
Starch	50. "
Phenol	1. "
Lanolin	26. "
Stearic acid	5. "
Triethanolamine	1.6 "
Water	137.4 "
	273.0

Add the triethanolamine and the stearic acid to half the water. Heat the mixture until the stearic acid melts and then stir until a creamy soap forms. Allow the mixture to become lukewarm and then stir in starch and continue to stir until all lumps have disappeared. Dissolve the barium sulphide in the rest of the water and bring to a boil. Then stir in the soap-starch solution and continue stirring until the mixture thickens. Add the melted lanolin and stir. Then slowly sift in the TiO_2 and mix until smooth. Finally add the phenol and perfume.

We're wrong . .

if personal service doesn't count . . . but we have found that it does make a difference to buyers

All inquiries handled personally by our officers.

•

For quick action, high quality, reasonable prices, try us.

WE DO OUR PART

W. BENKERT & CO.

INCORPORATED

Crude Drugs • Cosmetic Crudes

100 Gold Street New York City

Other Offices: DETROIT—CHICAGO—ST. LOUIS—BALTIMORE

DESCOLLONGES FRERES

LYON Established 1904 PARIS

■

HEXYL CINNAMIC ALDEHYDE

Gives a note softer and finer than Amyl Cinnamic Aldehyde, and a more "natural" effect in the final compound.

■

CONVALLAROL

New chemical product of particular interest as a base and fixative for Lily of the Valley. Extremely lasting, it helps to smooth and blend compounds into which it is introduced.

■

BENJ. FRENCH, INC.

New York: 160 Fifth Avenue

Chicago: 549 W. Randolph Street

BILE SALTS
CHOLESTERIN
IRON PEPTONATE

THE WILSON LABORATORIES

4221 So. Western Ave., Chicago, Ill.

also

816 First Ave., New York
24 Oregon Ave., Philadelphia
869 Folsom St., San Francisco
1220 W. Pico St., Los Angeles
826 Clark Ave., St. Louis

Improved Oil of Orange Flavor in Your Products

For finer, truer orange flavor, use Exchange Brand Oil of Orange U. S. P., made from rich California oranges under Exchange standards of production. A test will prove its six-point superiority in your products.

SIX-POINT SUPERIORITY

1. Finer Flavoring Value
2. Uniform Dependability
3. Superior Aroma
4. Truer Color
5. Stability in Your Product
6. Better Results at Lower Cost

NRA WE DO OUR PART

Exchange

CALIFORNIA COLD PRESSED OIL OF ORANGE U · S · P

Sold to the American market exclusively through:
FRITZSCHE BROTHERS, Inc.
78-84 Beekman St., New York City
DODGE & OLCOTT COMPANY
180 Varick St., New York City

Distributors for
PRODUCTS DEPARTMENT
CALIFORNIA FRUIT GROWERS EXCHANGE
Ontario, California

Producing Plant
THE EXCHANGE ORANGE PRODUCTS CO.
Ontario, California

Chest Rubs

(*Continued from page 332*)

Petrolatum	490 grams
	1,000 grams

Procedure: Melt the petrolatum and the lanolin. Rub up the menthol, chloral hydrate and camphor until liquified. Meanwhile allow the fats to become cool (120° F.) and then mix in the active ingredients.

NO. 9.

Menthol	10 grams
Camphor	10 "
Eucalyptus oil	18 "
Petrolatum, white	400 "
Methyl salicylate	15 "
	453 grams

Procedure: Add the menthol to the methyl salicylate and when dissolved add camphor. Bring temperature of petrolatum to about 120° F., add the eucalyptus and the mixture of active agents. Stir well.

NO. 10.

Thymol	10 grams
Menthol	20 "
Eucalyptus oil	20 "
Cubeb oil	20 "
Petrolatum	730 "
Mineral oil	200 "
	1,000 grams

Procedure: Dissolve the menthol and thymol in the oils. Melt the petrolatum, add the mineral oil and then mix in the thymol menthol solution.

No. 11.

Oil of pine needles	40 grams
Oil of turpentine	30 "
Camphor	20 "
Menthol	20 "
Hydrous lanolin	200 "
Petrolatum	690 "
	1,000 grams

Procedure: Rub up camphor and menthol until liquified. Add oil of pine and turpentine. Bring the temperature of the petrolatum and lanolin to 120° F. and stir in the foregoing mixture.

NO. 12.

Formaldehyde	.25 grams
Creosote	10.00 "
Turpentine	20.00 "
Menthol	20.00 "
Eucalyptus oil	20.00 "
Hydrous lanolin	300.00 "
White petrolatum	579.75 "
Croton oil	50.00 "
	1,000.00 grams

Procedure: Dissolve the menthol in the eucalyptus oil. Bring the temperature of the petrolatum to 120° F., add the hydrous lanolin, croton oil, creosote, turpentine, eucalyptus mixture, and formaldehyde in the order given, mixing well after each addition.

NO. 13.

Petrolatum	200 grams
Mineral oil, light	300 "
Spermaceti	100 "
Stearic acid	40 "
Menthol	10 "
Camphor	10 "
Eucalyptol	40 "
	700 grams

Procedure: Rub the menthol and camphor together until liquefied and add to the eucalyptus. Melt the stearic acid, spermaceti and petrolatum, add the mineral oil and mix. When cooled down to 120° F. add the camphor-phenol solution.

Cleansing Creams

(*Continued from page 336*)

Perfume	.5
	100.0

Procedure: Melt wax and petrolatum. Add oil. Dissolve borax in hot water. Add to above with stirring. Perfume at 120° F.

NO. 4. QUICK MELTING, ABSORPTION BASE TYPE I

Beeswax	7
Spermaceti	8
Lanolin absorption base	20
Water	50
Mineral oil	15
	100

Procedure: Melt the waxes and add the mineral oil. Warm the absorption base to 40° C. and the water likewise; then slowly add the water with steady but not violent agitation. Then add the melted waxes which should be of the same temperature.

NO. 5. QUICK MELTING, ABSORPTION BASE TYPE II

Beeswax	7
Spermaceti	8
Mineral oil	50
Lanolin absorption base	20
Water	15
	100

Procedure: Same as above.

NO. 6. QUICK MELTING, OILY TYPE

Petrolatum	40
Hydrous lanolin	10
Mineral oil	50
	100

Procedure: Melt the petrolatum, add the lanolin and mineral oil. Mix and perfume.

Tablet Counting Machinery

COATED AND UNCOATED TYPES

Accurate, Speedy and Visible Count without Handling or Chipping

Send sample container and tablets for quotation

JOHN W. AYERS & SON

Bloomfield, N. J.

Manufacturers of Tablet Counting and Filling Machinery since 1883

CRUDE DRUGS

Tragacanth Karaya

Quince Seed Henna

PEEK & VELSOR, INC.

Established 1840

100 GOLD STREET NEW YORK, N. Y.

Warehouse and Mills JERSEY CITY, N. J.

COSMETIC CERTIFIED & VEGETABLE

COLORS

Saponine—Chlorophyll

INTERSTATE COLOR CO., INC.

7 Beekman Street New York City

GERANIOL

for Soap

In various grades to meet every requirement as to price.

A. M. TODD COMPANY

KALAMAZOO MICHIGAN

Business Established in 1869

BOTANICAL PRODUCTS

(DRUGS AND ALLIED MATERIALS)

Over 800 Varieties

The largest stocks of Botanical products *in the world*

Laboratory Controlled Quality assures the Manufacturer in every line the highest quality material

Producers of EVENIZED highest *quality Powders of:*

TRAGACANTH

KARAYA ARABIC

Our NEW PRICE LIST JUST ISSUED *comprising over 800 Crude Botanical* items is available upon request

S. B. Penick & Company

132 Nassau Street NEW YORK, N. Y.

COD LIVER OIL

A-A BRAND

Finest Medicinal Quality

The recognized standard, known for its high vitamin contents. Guaranteed the finest Norwegian non-freezing medicinal cod liver oil.

POULTRY GRADES

For animal and poultry feeding

Highest vitamin potency

Packed in barrels or drums

Write us for quotations

For Spot Delivery or direct shipment from Norway

BRÖDR. AARSAETHER A/S

AALESUND, NORWAY

P. R. DREYER Inc.

Sole Representative in the United States

12 EAST 12th STREET

NEW YORK, N. Y.

CHICAGO BALTIMORE LOS ANGELES

PHILADELPHIA ST. LOUIS SAN FRANCISCO

KANSAS CITY CINCINNATI DETROIT

NO. 7. ROLLING MASSAGE CREAM

Sweet milk	76.00
Formaldehyde	.15
Borax	1.25
Alum	2.25
Bicarbonate of soda	.25
Sodium benzoate	1.25
Boric acid	2.50
Water	16.35
Perfume to suit.	
	100.00

Procedure: Add the formaldehyde to the milk, warm to 122° F. Make a solution of the borax, using half the water and stir it quickly into the milk. Bring the temperature to 131° F. Boil rest of the water and dissolve the alum in it, then add the solution to the milk, keeping the temperature at 131° F., stirring slowly. Allow to cool and then strain out the precipitate. Wash the precipitate with water and strain. Then mix in the sodium bicarbonate, sodium benzoate and boric acid, perfume and color. Another method of accomplishing the same result is to add the formaldehyde, borax, boric acid, and sodium benzoate to the milk and bring to a boil. Then add tartaric acid instead of alum and allow to stand 24 hours. Then strain, wash and proceed as above. Casein creams can also be made by wetting dried casein and adding it to a cold cream or mineral jelly base, but some manufacturers contend that the cream so made is apt to be sticky and lumpy.

NO. 8. LIQUID CLEANSING CREAM

Monoglyceride stearate	6.0
Water	75.5
Glycerin	10.0
Stearic acid	1.0
Oleic acid	2.0
Mineral oil	5.0
Perfume	.5
	100.0

Procedure: Put all the ingredients into a kettle excepting the perfume and heat until melted and mass is slimy. Agitate continuously until mass is cool. Then perfume.

NO. 9. COLORLESS LIQUID SKIN CLEANSER

Glycerin	22.0
Alcohol	10.0
Water	64.5
Tribasic sodium phosphate	3.0
Perfume	.5
	100.0

Procedure: Dissolve the phosphate in the water, add the glycerin. Mix the alcohol and perfume and add to the first solution. Mix and filter.

New Medicines

(*Continued from page 376*)

tains starches, coffee powder. For nervous diseases; also for rejuvenation. Chemische Pharmazeutische Praeparate Dr. G. v. Walck G.m.b.H., Berlin, Germany.

Marko's Zellen-Kraeftigungssalz—Radioactic, dietetic preparation. Consists principally of lactose, calcium phosphate, magnesia, iron saccharate, an organic preparation (probably pulverized liver) and a little cocoa powder. Heilinstitut W. Markowski, Berlin-Reinickendorf, Germany.

Mollcerin—Salve base, also designated as unguentum cholesterini neutrale. Yellowish, soft salve resembling petrolatum in appearance. Claimed to be permanently stable, absolutely homogeneous and odorless as well as neutral. Absorbs up to 400% water and more and when mixed with 0.5% solution of boric acid (for example 65% boric acid solution and 35% mollcerin), a soft cream is obtained which does not dissociate when rubbed into skin and which is not porous. Salve is recommended for making various preparations, such as salves for freckles (10 to 18% bismuth subnitrate, 5% glycerin), for preparations, containing peru balsam, ichthyol, iodine, potassium iodide, mercury salts of various sorts, naphthol, sulfur, camphor, menthol, eucalyptol (inhalation creams), salicylic acid, alumina, zinc oxide, resorcinol, tar and the like. Mollcerin may also be worked up with petrolatum, which is rendered strongly absorptive of water thereby. Mixtures may be made by gently heating 50 parts of mollcerin and 50 parts of petrolatum, such a mixture absorbing 200 to 220 parts of water. Chemisch-pharmazeutische Praeparate Apotheker Otto Schmatolla, Hamburg, Germany.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of The Drug and Cosmetic Industry, published monthly at Pittsfield, Mass., for October 1, 1933.

State of New York, County of New York—ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Thomas R. Farrell, who, having been duly sworn according to law, deposes and says that he is the Editor of The Drug and Cosmetic Industry, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Drug Markets, Inc., 101 West 31 St., New York, N. Y.; Editor, Thomas R. Farrell, 101 West 31 St., New York, N. Y.; Managing Editor, none; Business Manager, Frazer V. Sinclair, 101 West 31 St., New York, N. Y.

2. That the owner is: (If the publication is owned by an individual his name and address, or if owned by more than one individual the name and address of each, should be given below; if the publication is owned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.) Drug Markets, Inc., Frazer V. Sinclair, Thomas R. Farrell.

3. That the known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

Thomas R. Farrell, Editor.

Sworn before me this 20th day of September, 1933, Joseph Cass, Notary Public. My commission expires March 30, 1935.

PRIVATE FORMULA WORK

Cosmetics
Suppositories
Vaginal Jelly
Pharmaceutical Preparations
Manufacture and Distribution

Also headquarters for Drugs, Chemicals, Essential Oils and Allied Products

EHRMANN-STRAUSS CO., INC.
203 West Houston St., New York
"IF IT'S A DRUG—WE HAVE IT"

GUM TRAGACANTH
VANILLA BEANS
GUM ARABIC
GUM KARAYA

THURSTON & BRAIDICH
55 Vandam St., New York, N. Y.

Lanolin

U. S. P.
Superior Quality

Write for samples and quotations

Manufactured by

AMERICAN LANOLIN CORPORATION
Lawrence . . . Massachusetts

BENZOL PRODUCTS COMPANY
237 South Street, Newark, N. J.
Manufacturers of Fine Chemicals

OXY-QUINOLIN BASE
OXY-QUINOLIN SULPHATE
and specialties from this base

ABBOTT CHEMICALS

SYNTHETIC MEDICINAL CHEMICALS
Acriflavine Neutral
Acriflavine Acid
Barbital
Barbital Sodium
Benzocaine
Chloramine
Cinchophen
Neocinchophen
Phenobarbital
Phenobarbital Sodium
Procaine Hydrochloride
Procaine Base
Proflavine

ALKALOIDS AND ALKALOIDAL SALTS
Berberine Sulphate Acid
Berberine Sulphate Neutral
Berberine Hydrochloride
Colchicine Alkaloid
Colchicine Salicylate
Ephedrine Alkaloid
Ephedrine Hydrochloride
Ephedrine Sulphate
Hydrastine Alkaloid
Hydrastine Hydrochloride
Lobeline Sulphate

POWDERED AND SOLID EXTRACTS, CONCENTRATIONS, RESINS
Arbutin
Podophyllin

For Quotations Address:
CHEMICAL SALES DEPARTMENT

Abbott
ABBOTT LABORATORIES
NORTH CHICAGO, ILL.

Perfumes, Cosmetics and Soaps

By WILLIAM POUCHER, PH. C.

IN TWO VOLUMES

Perfumes
Floral Absolutes
Synthetics
Blending
Fixation
Toilet Waters
Soap Perfuming
Soap Coloring
Medicated Soap
Tobacco Flavoring
Cachous
Incense
Fumigants
Sachets
Solid Perfumes
Bath Salts
Reducing Salts
Bath Powders
Tooth Powders
Tooth Pastes
Mouth Washes
Hair Restorers
Hair Tonics
Hair Pomades
Hair Fixers
Dandruff Lotions

VOLUME I.
Third Edition

ALL the new synthetics and other products that have been developed in recent years are described in this new edition.

313 Pages Cloth 5½ x 8¾

$6.50

VOLUME II.
Fourth Edition
Just Published

THOUSANDS of formulas, for all kinds of perfumes, soaps, and every one of the preparations listed on this page come to you in the pages of this practical book. Just published in a new edition, it includes the newest processes of today as well as the standard ones that have been in use for years.

599 Pages Cloth 5½ x 8¾ Illustrated

$9.00

Indispensable to You

This complete account of the perfume and cosmetic industry provides a tremendous number of formulas, and a wealth of new material.

Shampoo Powders
Shampoo Liquids
Brilliantines
Hair Dyes
Lip Sticks
Cuticle Removers
Nail Bleaches
Nail Polishes
Shaving Creams
Shaving Powders
Shaving Lotions
Cold Creams
Vanishing Creams
Massage Creams
Freckle Removers
Sunburn Creams
Deodorants
Smelling Salts
Theatrical Preparations
Face Powders
Compacts
Rouges
Talcums
Baby Powders
Eyebrow Pencils
Grease Paints

Send prepaid to any address by
DRUG AND COSMETIC INDUSTRY
101 W. 31st St., New York, N. Y.

Section in the New York Quinine and Chemical Works Plant

Manufacturers of

Bismuth Subcarbonate
Bismuth Subgallate
Bismuth Subnitrate
and other Bismuth Salts
Brucine Alkaloid
Brucine Sulphate
All Salts of
Cinchona Alkaloids
Codeine Alkaloid
Codeine Phosphate
Codeine Sulphate
Iodine Resublimed
Iodoform
Menthol-Y
Morphine Alkaloid
Morphine Sulphate
Opium Gum
(Gran. and Powd.)
Potassium Iodide
(Cryst.-Gran. and Powd.)
Quinine Sulphate
and other Quinine Salts
Strychnine Alkaloid
Strychnine Sulphate
Thymol Iodide

THE NEW YORK QUININE & CHEMICAL WORKS INC.

GENERAL OFFICES

99-117 North Eleventh Street, New York, Borough of Brooklyn

NYQ

ST. LOUIS DEPOT, 403 NORTH FIRST ST., ST. LOUIS, MO.

NYQ

Prices Current

Medicinal, Aromatic, and Photographic Chemicals, Crude Drugs, Spices, Essential Oils and Concentrates, Miscellaneous Raw Materials, etc.

Chemical prices quoted are of American manufacturers, spot New York, f. o. b. for immediate shipment, unless otherwise specified.

Products sold f. o. b. works are so specified. Imported chemicals are so designated. Resale stocks, when a market factor, are indicated "second hand."

Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment

The range of price given is not "bid and asked," but are prices of different sellers, based on varying grades and/or quantities. Containers named are original packages most commonly sold.

Acetanilid
Iodide

Chemicals

Acetanilid, USP, 200 lb bbls..lb	.26	.27
Acetone, pure 350 lb drs wks..	.10	.11
Acetphenetidin, 225 lb bbls..lb.	1.20	1.25
ACID, Acetylsalicylic, 225 lb bbls.	.70	.75
Agaric, 1 oz vials ....oz	...	3.50
Arsenous, USP, 220 lb bbls lb.	...	.18
Benzoic, USP, 100 lb bbls.lb.	.55	.60
Boric, 300 lb bbls.....lb.	.07	.08
Cacodylic, 5 lb. bot.....lb.	...	8.00
Camphoric, USP, VIII 1 lb bot.....lb.	5.25	5.40
Carbolic, USP, crys 112 lb tins.....lb.	.17	.18
Cinnamic, 5 lb cans.....lb.	2.85	3.25
Citric, USP, crys 230 lb bbl lb	...	.29
USP, crys imp. 112 lb keg lb.	.34	.36
USP, powd 200 lb bbl...lb.	...	.31½
Gallic, USP, 150 lb bbls..lb.	...	.74
Glycerophosphoric, 25% 1 lb bot.....lb.	1.40	1.75
Hydriodic, USP, 10% 5 lb bot.....lb.	...	.59
Hydrobromic, USP, 40% 155 lb. cbys.....lb.	...	.55
Hypophosphorous, USP, 30% 5 gal demis.....lb.	...	.75
Lactic, USP, VIII 100 lb cbys lb.....lb.	.53	.55
USP, X 100 lb cbys....lb.	.55	.57
Phosphoric, USP, Syr 70 lb drs.....lb.	.14	.15
Pyrogallic, crys 5 lb cans..lb.	1.30	1.40
Resublimed, 5 lb cans..lb.	1.60	1.70
Salicylic, USP, 100 lb bbls.lb.	.40	45
Stearic, double pressed, bags lb.	.09½	.10¼
Triple pressed, bags,....lb.	.11¾	.13
Succinic, 100 lb bbls.....lb.	...	1.35
Sulfurous, USP, 6% 100 lb cbys.....lb.	.05	.06
Tannic, USP, fluffy 50 lb bbls. lb.	.83	.86
Powd 200 lb bbls.....lb.	.70	.75
Tartaric, USP, 300 lb bbls.lb	.25	.25½
Aconitine, Alk, crys 1 oz vials oz.	...	29.00
Amorphous, 1 oz vials....oz.	...	17.00
Agaricin, 1 oz vis incl.....oz.	...	2.32
ALCOHOL, Benzyl, 5 lb bot lb. F O B Works	1.20	1.35
Ethyl, USP, 190 pf 54 gal drs.....gal.	...	2.535
Grain U. S. P. bbls....gal.	...	2.565
Pure tax free drums...gal.		
Ethyl.....	...	.445
Grain.....	...	.475
Denatured, (drums included) add 5c for bbls.		
No. 1 spec.....gal.	.335	.415
No. 5 comp.....gal.	.34	.42
23 a, spec.....gal.	.37	.49
39 b, spec.....gal.	.38	.50
40 m. spec .....gal.	.34	.46
Isopropyl refd 98-99% drs. incl.....gal.	.55	.60
Phenylethyl, 1 lb bot.....lb.	4.30	4.50
Aloin, USP, 100 lb cases....lb.	.77	.82
Aluminum Acetotartrate kegs lb.	...	1.60
Amidipyrine, 10 lb boxes....lb.	4.00	4.10
AMMONIUM, Acetate 100 lb kegs.....lb.	.26	.33
Benzoate, USP, 1 lb bot...lb.	...	1.27
Borate, 10 lb bot.....lb.	...	.35
Bromide, USP, 450 lb bbls.lb.	.39	.40
Carb, USP, lump 150 lb kegs lb.	...	.11
USP, powd 150 lb kegs..lb.	...	.12
Citrate, 100 lb kegs ...lb.	.90	1.30
Ichthyolate, as to brand..lb.	4.00	4.50
Iodide, USP, 25 lb jars ..lb.	...	3.60
Phosphate, dibasic 250 lb bbls lb.	.48	.50
Salicylate, USP, 100 lb kegs lb.	1.15	1.20
Valerate, USP, 25 lb jars...lb.	2.75	2.90
Amylene Hydrate, 1 lb bot..lb.	...	7.10
Antipyrine, USP, 100 lb cans.lb.	2.00	2.50
Apomorphine Hydrochloride, ¼ oz. vials.....oz.	24.60	22.70
Arecoline Hydrobrom, 1 oz vials oz.	4.75	5.00
Aspidospermine Amorphous..oz.	...	15.00
Atropine Alk, USP, 1 oz. vials oz.	5.25	5.50
Methyl bromide, 1 oz vials.oz.	...	25.00
Sulfate, 5 oz cans.....oz.	...	2.50
Single ounce.....oz.	...	3.00
Barbital, 1 lb. bot.....lb.	3.50	3.60
Barium Iodide, 5 lb box.....lb.	...	4.35
Sulfate, X-ray diagn bbls..lb.	.09½	.10
BAY RUM Porto Rico, 45 gal. bbls.....gal.	.75	.80
Domestic syn. 50 gal bbl..gal.	.70	.75
St. Thomas, 50 gal bbls...gal.	.80	.90
Benzocaine 25 lb. lots..... 1 lb.l ots.....lb.	5.00	5.75
Benzonaphthol, 5 lb boxes...lb.	2.50	2.60
Benzoyl Cholride, 500 lb dr..lb.	1.00	1.05
Benzyl Benzoate, Medicinal FFC.....lb.	1.20	1.40
Chloride Redis, 160 lb cby.lb.	.30	.35
Formate, 1 lb bot.....lb.	3.25	3.50
Succinate, 160 lb cby.....lb.	...	5.25
BISMUTH, metal 100 lb cases lb.	...	1.25
Ammon. Citrate, USP, 5 lb cans.....lb.	...	3.40
Betanaphthol ate, 5 lb box.lb.	...	3.14
Citrate, USP, 5 lb cans....lb.	...	2.77
Chloride..... .....lb.	...	2.85
Hydroxide .....lb.	...	3.27
Nitrate, 25 lb jars.....lb	...	1.20
Oxide anhydrous.....lb.	...	3.45
Oxychloride, 25 lb boxes...lb.	...	2.95
Salicylate, 25 lb boxes.....lb.	...	1.85
Subcarbonate, USP, 25 lb boxes.....lb.	1.65	1.78
Subcarbonate, X-ray diag 1 lb. bot.....lb.	2.79	1.86
Subgallate, USP, 25 lb boxes lb.	1.65	1.78
Subiodide, 5 lb lots.....lb.	...	4.20
Subnitrate, USP, 25 lb jar.lb.	1.40	1.53
Subsalicylate, USP, 25 lb boxes.....lb.	2.45	2.50
Tannate.....lb.	...	2.32
Borax, crys USP, 400 lb bbls.lb.	...	.04½
Bromoform, USP, 5 lb bot cases lb.	1.75	1.90
Butylchloral Hydrate bot....lb.	4.00	5.00
Cadmium iodide, 10 lb bot...lb.	...	3.65
CAFFEINE Alk, USP, 1 ..... 100 lb kegs.....lb.	2.20	2.30
Citrated, 50 lb cans.....lb	1.80	1.85
Hydrobromide, 1 lb bot...lb.	4.80	5.00
Hydrochloride, 1 lb bot...lb	6.05	6.55
Sulfate, 1 lb bot.....lb.	5.40	5.90
Sodium Benzoate, tins....lb.	...	3.05
Salicylate, tins.....lb.	...	2.95
Calcium Bromide, 100 lb cs..lb.	...	.60
Carb, USP, 175 lb bbls....lb.	.05	.06
Gluconate, Gran. 125 lb..... bbls.....lb.	.47	.52
Powd.....lb.	.47	.52
Glycerophos, 250 lb bbls...lb.	...	1.05
Hypophos, USP, 25 lb cans lb.	.55	.60
Iodide, 5 lb bot.....lb.	...	3.60
Lactate, USP, 500 lb bbls lb.	.35	.40
Lactophosphate Soluble...lb.	...	1.20
Powdered tins.....lb	...	1.00
Insol, powd tins.....lb.	...	.50
Phosphate & Sulfate Tooth Paste grade, Works..lbs.	.03	.06
Sulfide, USP, 100 lb drs..lb.	.21½	.24
CAMPHOR, Jap. ref. slabs 100 lb. cases.....lb.	.49	.50
Refined powd.....lb.	.50	.51
½ oz tab, 100 lb cases....lb.	.56	.57
Liniment, bbls.....gal.	2.10	2.20
Monobrom, 100 lb cases...lb.	1.60	1.65
Casein edible, 100 lb kegs ..lb.	.45	.55
Charcoal Animal medicinal jars incl.....lb.	...	.50
Charcoal Wood, powd, 100 lb. bbls.....lb.	.06	.07
Chloral Hydrate, USP, 25 lb jars.....lb.	.75	.77
100 lb drums.....lb.	.70	.75
Cholesterin .....lb.	11.00	17.00
Chloroform, USP, 50 lb drs...lb.	.32	.35
Chlorophyll, 1 lb. bot.....lb.	3.75	4.00
Chromium Sulfate Scales, tins lb.	.45	.50
Powdered tins.....lb.	.50	.55
Chrysarobin, 50 lb tins.....lb.	2.50	2.55
Cinchonine Alk, 100 oz tins..oz. Crystal.....oz.	.46	.54
Sulfate, 100 oz tins.....oz.	.30	.32
Cinchonidine Sulfate, 100 oz tins oz.	.42	.44
Cinchophen, U.S.P. kegs...lb.	2.75	3.25
Cocaine Alk, USP, 1 oz vial..oz.	...	12.57
Hydrochloride, USP.....oz.	9.75	10.00
CODEINE Alk, 1 oz vials, 10 lots.....oz.	...	11.87
Hydrobromide.....oz.	...	8.92
Hydrochloride.....oz.	...	10.67
Nitrate, oz vl 10 oz lots....oz.	...	9.80
Phosp. oz vl, 10 oz lots....oz.	...	9.17
Salicylate.....oz.	...	8.25
Sulfate, oz vl, 10 oz lots...oz.	...	10.57
Colchicine Alk, USP, 1 oz vl.oz.	...	22.00
Salicylate, 1 oz vls.....oz.	...	35.50
Cream Tartar, USP, 300 lb bbls lb.	.17½	.18¼
Imp. powd. 224 lb bbls....lb.	.17¾	.18¾
Creosote, USP, 42 lb cbys....lb.	.45	.47
Carbonate, 150 lb.....lb.	1.40	1.75
Cresol, USP, 400 lb drums...lb.	...	.18
500 lb drums.....lb.	.12	.15
DIGITALIN Pure, 1 oz vial .oz	15.00	15.50
Dover's Powder, USP, 5 lb tin lb.	2.75	2.80
Duboisine Sulfate, 1 oz vl....oz.	35.00	40.00
Emetine Alk, 15 gr vial.....oz.	...	.85
Hydrochloride, USP, 1 oz vl .....oz.	13.00	13.25
15 grain vials.....oz.	2.50	2.70
Ephedrine, alk. 25 oz. tins,..oz.	1.50	1.90
Hydrochloride, 25 oz. tins, oz.	1.30	1.65
Sulfate, 25 oz. tins.....oz.	1.30	1.65
Epsom Salts, USP, 200 lb bbls .....100 lb.	2.25	2.50
Imp. 100 lb bbls.....100 lb.	2.30	2.35
Ergotin Bonjean, 1 lb jars...lb.	18.50	19.00
Eserine Alk, 1 oz vials.....oz	...	50.00
Salicylate, 1 oz vials.....oz.	...	40.00
Sulfate, USP, VIII 1 oz vials oz.	...	40.00
ETHER, USP, 55 lb drums..lb.	...	.12
Anaesthesia, 55 lb drums..lb.	...	.24
Nitrous, 1 lb bot.....lb.	.75	.77
Ethyl Chloride, 200 lb bot...lb.	.22	.24
Ethyl Iodide, 5 lb bot.....lb.	6.00	6.05
Formaldehyde, USP, 100 lb cbys lc-l wks.....lb.	.07	.07½
Gall Extract.....lb.	.20	.21
GLANDULAR SUBSTANCES 1 lb. lots		
Duodenal Substance.....	...	3.75
Liver Extract 1-20	...	5.75
Orchic Substance (Testicular)	...	3.75
Ovarian Substance, whole ..	...	12.50
Ovarian Residue	...	10.00
Pituitary Substance, whole..	...	45.00
Pituitary Substance, Anterior Lobe	...	40.00
Thyroid, U.S.P.....	...	3.75
Oxgall Powder.....	...	1.25
GLYCERIN, CP, 550 lb drums lb.	...	.10½
Gold Chloride, bottles.....oz.	12.00	12.50
Guaiacol, liq. USP. 100 lb cbys.....lb	1.60	1.70
Crystals.....lb	2.25	2.50
Benzoate, 1 lb bottles.....lb.	...	3.00
Carbonate, 5 lb boxes.....lb.	1.75	1.80
Halazone, 5 lb bot.....lb.	2.75	3.25
Hexamethylenetetramine, USP, 100 lb dr.....lb.	.46	.47
Homatropine Hydrobrom USP. .....oz.	...	14.50
5 oz and 1 oz vials.....oz.	...	13.50
Hydrastine Alk, USP, 1 oz vial .....oz.	20.50	21.00
Hydrochlide, USP, 1 oz vials .....oz.	20.50	21.00
Sulfate, 1 oz vial.....oz.		
Hydrastinine Hydrochloride, USP, 15 gr vials.....oz.	22.50	23.00
Hydrogen Peroxide, USP, soln 375 lb bbls.....lb.	...	40.00
Hyoscine Hydrobrom, USP, 1 oz vials.....oz.	.03½	.04½
5 oz, 1 oz vials.....oz.	13.07	13.57
Hyoscyamine Alk, crystals, 1 oz vials.....oz.	...	25.07
Amorphous, 1 oz vial...oz.	...	75.07
Hydrobromide, USP. 1 oz vial .....oz.	...	25.00
Sulfate, 1 oz vial.....oz.	...	25.07
Hypoquinone, 100 lb kegs...lb.	...	1.10
ICHTHYOL. tins.....lb.	4.00	4.25
Iodide Arsenous, 5 lb bot...lb.	...	5.20

Arsenous-Mercuric soln, 5 lb bot	lb	.26
Iodine, crude, 200 lb kegs	lb.	15 sld per kilo
Resublimed, 25 lb jars	lb.	2.10
Tincture bbls	gal.	3.00
Iodoform, powd 10 lb bot	lb.	5.30
Iron & Ammonium Citrate, USP, 50 lb cans	lb.	.57 .58
Chloride, USP, lump 400 lb bbls	lb.	.06 .08
Citrate, USP, VIII 25 lb can	lb.	.94 .99
Hypophosphite, 5 lb cans	lb.	1.40 1.50
Iodide, 1 lb bottles	lb.	3.00
Phosphate, USP, 50 lb cans	lb.	.69
& Potas Oxalate, 250 lb bbl	lb.	.45
Pyrophosphate, USP, 50 lb	lb.	.74 .80
& Sod Oxalate, 50 lb. cans	lb.	.30½
Sulfate, USP, crys bbls	lb.	.04 .04½
Ferrous dried bbls	lb.	.08
Valerate, tins	lb.	2.75 3.00
Jalap Resin, USP lumps, 5 lb tins	lb.	4.00
Powdered, tins	lb.	4.65
Lanolin, hyd 350 lb. bbls	lb.	.13 .15
Anhydrous, 350 lb. bbls	lb.	.14 .16
Lead Acetate, USP, 100 lb kegs	lb.	.16½ .19½
Iodide, USP, VIII 5 lb bot	lb.	2.55
Lecithin, 5 oz. jars	oz.	1.00 1.30
Vegetable, cans	lb	1.00 2.50
Licorice Ext Mass, cases	lb.	.19 .20
Compound powder, bbls	lb.	.11 .13
LITHIUM CARBONATE, 250 lb bbls	lb.	1.25 1.35
Citrate, USP, 100 lb kegs	lb.	1.40
Iodide, 5 lb bottles	lb.	4.60
Lobeline Sulfate, ¼ oz vial	oz.	8.75
Magnesium Carbonate, USP, 100 lb bbls	lb.	.08 .09
English, oz blocks	oz.	.16 .18
Glycerophosphate, 5 lb tins	lb.	3.20 3.25
Hypophosphite, 5 lb cans	lb.	1.10 1.15
Oxide, 100 lb. cases	lb	.35 .45
Salicylate, 100 lb kegs	lb	1.10
Stearate, bbls	lb.	.18 .20
Manganese Glycerophosphate, 5 lb tins	lb.	2.90 3.00
Hypophosphite, USP, VIII 5 lb cans	lb.	1.35 1.40
Iodide, 1 lb bottles	lb.	5.35
MENTHOL, USP, 60 lb cases	lb.	2.75 2.95
Synthetic, cases	lb.	2.50 2.90
Mercury Metal, 75 lb flasks	fl.	66.00 67.00
Bichloride, crys 25 lb box	lb.	.92
Gran powd, 100 lb kegs	lb.	.77
Bisulfate, 25 lb boxes	lb.	1.48
Blue Mass, 25 lb boxes	lb.	.84
Powd, 25 lb boxes	lb.	.85
Blue Ointment, USP, 50%, 25 lb cans	lb.	.99
Mild 30%, 25 lb cans	lb.	.69
33 1/3% mercury	lb.	.72
Calomel, 50 lb boxes	lb.	1.23
English	lb.	2.65 2.75
Iodide, green, 25 lb jars	lb.	3.95
Red, USP, 25 lb jars	lb.	3.60
Yellow, USP, VIII, 25 lb jars	lb.	3.70
Red precip Powd. USP, 25 lb. boxes	lb.	1.34
White precip, Powd., USP, 25 lb. boxes	lb.	1.41
Salicylate, 25 lb bot	lb.	2.32
With chalk, USP, 25 lb boxes	lb.	.69
Methanol, Pure 1c-1 drs	gal	.41½
Methyl Salicylate, USP, 50 lb cans	lb.	.40 .42
Methylene Blue, USP, med 5 lb cans	lb	2.00 2.05
Milk powd, 150 lb bbls	lb.	.09 .12
MORPHINE Alk, 5 oz tin	oz.	11.15 11.20
Acetate, 5 oz tins	oz.	8.80 8.85
Hydrobromide, 5 oz tins, 10 oz lots	oz.	8.75 8.80
Hydrochloride, 5 oz tins, 10 oz lots	oz.	8.85 9.10
Ethyl Hydrochloride, 5 oz tins 10 oz lots	oz.	10.60 10.82
Sulfate, 5 oz tins, 10 oz lots	oz.	8.75 8.80
Naphthalene Flake, 175 lb bbls wks	lb.	.04½ .05
Balls, 250 lb bbls wks	lb.	.05½ .06
Neo-cinchophen 5 lb. lots	lb.	15.00 18.00
Oxgall, Purified, 5 lb bot	lb.	2.00 2.50
USP Extract, 5 lb. bot	lb.	1.80 1.90
Oxyquinoline Sulfate, tins	lb.	5.00 5.75
Pancreatin, USP, 100 lb	lb.	1.90
Para-Aldehyde, USP, 100 lb. carboys	lb.	.48 .50
Pepsin, USP, 100 lbs. 1:3000	lb.	2.25
100 lbs. 1:6000	lb.	4.00
100 lbs. 1:10000	lb.	6.50
Peptone, powd., or granular 5 lb. 100 lb. lots	lb.	.70 1.00
PHENOBARBITAL, U. S. P., 100 lb. lots	lb.	5.50
Phenolphthalein, U. S. P. 100 lb drums	lb.	.52
5 lb cans 100 lb lots	lb.	.60
Yellow		.47
Pilocarpine Hydrochloride, USP, 1 oz vials 25 oz lots	oz.	2.00 2.25
Nitrate, 25 oz lots	oz.	1.90 2.15
Single ounce	oz.	2.15 2.40
Alkaloid, 15 gr vials	vl.	.75
Piperadine, 25 oz bottles	lb.	8.00
Popodhyllin 5 lb bottles	lb.	4.00 4.15
Potassium Acetate, USP, 100 lb kegs	lb.	.29 .30
Bicarb, USP, crys 320 lb bbls	lb.	.09½ .10
Bromide, USP, crys 100 lb cs	lb.	.36 .37
Citrate, USP, 100 lb. box	lb.	.42½ .43
Guaiacol Sulfonate	lb.	1.95 2.25
Potassium Hypophosphite, 10 lb. cans	lb.	.65 .70
Iodide, USP, 25 lb cases	lb.	2.00
Lactophosphate, 4 oz bot	lb.	.90
Permangan, USP, crys, 100 lb drs wks	lb.	.16 .16½
Phosphate dibasic pure, kegs	lb.	.49
Salicylate, 25 lb cans	lb.	1.18
Sulfate, USP, VIII, 100 lb kegs	lb.	.13 .15
Sulfocyanide, CP 15 lb jars	lb.	.50
Tartrate, CP, tins	lb.	.65
Pyrogallol, USP, see Acid Pyrogallic		
Quinidine Alk, crystals, 100 oz. tins	oz.	.72 .78
Sulfate, 100 oz tins	oz.	.50
QUININE SULFATE, USP, 100 oz tins	oz.	.48
1 oz tins, 100 oz lots	oz.	.58
Acetate	oz.	.92
Arsenate	oz.	.92
Benzoate	oz.	.92
Bisulfate, USP	oz.	.48
Citrate	oz.	.65
Dihydrobromide	oz.	.68
Dihydrochloride, USP	oz.	.66
Ethyl Carbonate	oz.	.52
Ferrocyanide	oz.	.92
Formate	oz.	.87
Glycerophosphate	oz.	1.10
Hydrobromide, USP	oz.	.62
Hydrochlorosulfate	oz.	.66
Hypophosphite	oz.	.84
Lactate	oz.	.65
Phenolsulfonate	oz.	.62
Phosphate	oz.	.76
Salicylate, USP	oz.	.66
Tannate, USP	oz.	.78
Tartrate	oz.	.92
Valerate	oz.	.72
Urea Hydrochloride, USP	oz.	.66
Rennet, N. F. 5 lb 1:25,000	lb.	2.95 3.50
Resorcinol, USP, 25 lb cans	lb.	1.57 1.65
Rochelle Salt, USP, 225 lb bbl	lb.	.12½ .13
Rock Sugar, 5 lb boxes	lb.	.15
Saccharin, USP, 10 lb cans	lb.	1.70 1.80
USP, Soluble, 10 lb cans	lb.	1.75 1.85
Salicin, USP	lb.	7.00 7.25
SALOL, USP, 100 lb drums	lb.	.90
Saltpetre, powd, bbls wks	lb.	.06½ .08½
Santonin, USP, bulk	lb.	60.00 65.00
Saponin, refined	lb.	1.30 1.50
Seidlitz Mixture, 250 lb bb	lb.	.10¾ .11½
Silver Metal, American	oz.	.29½
Iodide, 16 oz lots	oz.	.69
Nitrate, 100 oz bottles	oz.	.29⅜ .30½
Nucleinate, bulk	oz.	.37
Proteinate	oz.	.39 .41
SODIUM BENZOATE, USP, 100 lb bbls	lb.	.47 .52
Bromide, USP, 100 lb kegs	lb.	.36 .37
Cacodylate, USP, 25 lb bot	lb.	6.00 6.25
Citrate, USP, X100 lb. box	lb.	.31½
USP VIII, 100 lb. box	lb.	.25
Glycerophosphate, N.F., crys 25 lb cans	lb.	1.27 1.33
Powder, 25 lb tins	lb.	1.32 1.38
Soln, USP, 25 lb tins	lb.	1.05 1.15
Hypophosphite, USP, 25 lb cans	lb.	.60 .65
Iodide, USP, 25 lb jars	lb.	2.75
Phosphate (Mono-Sodium), 100 lb kegs	lb.	.28 .29
Di-Sodium USP, granular, 275 lb bbls	lb.	.07½ .08
Pyrophosphate, 100 lb kegs	lb.	.29
Salicylate, 100 lb kegs	lb.	.47
Sulfocarbolate, USP, 100 lb kegs	lb.	.25
Sulfocyanate, CP crys, jars included	lb.	.60
Spartein Sulfate, USP, 25 oz bulk	oz.	.65 .70
Single oz vial	oz.	.77 .90
STRONTIUM BROMIDE USP, 50 lb kegs	lb.	.52 .53
Carb, 100 lb kegs wks	lb.	.20
Iodide, USP, 25 lb jars	lb.	2.95
Lactate, kegs	lb.	.90 1.10
Nitrate, 600 lb bbls NY	lb.	.08 .08½
Imp. bbls NY	lb.	.08 .08½
Salicylate, USP, 100 lb keg	lb.	1.10
Strophanthin, USP, 1 oz vial	oz.	19.00 19.00
Crystals	lb.	75.00 75.00
Strychnine Alk, USP crys, 100 oz tins	oz.	.37
Powdered	oz.	.27
Acetate	oz.	.65
Arsenate, 25 oz cans	oz.	.65
Glycerophosphite, USP	oz.	.65
Hydrobromide	oz.	.65
Hydrochloride	oz.	.65
Hypophosphite	oz.	.75
Nitrate, USP	oz.	.60
Phosphate	oz.	.65
Sulfate, USP, powd	oz.	.24
Sugar, refined, 275 lb bbl 100 lb		5.80 5.90
Milk, USP, 200 lb bbls	lb.	.18 .20
Sulfonethylmethane, USP, 10 lb boxes	lb.	3.85 4.05
Sulonmethane, USP, 10 lb box	lb.	2.65 3.85
Sulfur flwrs. washed, USP, 125 lb bbl	lb.	.06
Iodide, USP, VIII, 5 lb bot	lb.	3.85
TARTAR EMETIC, USP, 300 lb bbls	lb.	.26 .28
Terebene, tins	lb.	.85
Terpin Hydrate, USP, 100 lb kegs	lb.	.41 .42
Theobromine Alk, 5 lb cans	lb.	1.80 1.85
Sod. Salicylate, 1 lb bot	lb.	1.95 2.00
Sod. Benzoate, 1 oz vials	oz.	1.00
Thymol, USP, 25 lb tins	lb.	1.55 1.65
Iodide kegs	lb.	4.30
Titanium Oxide, tons, bags,	lb.	.18
100 lb. kegs	lb.	.19½
Veratrine Alkaloid	oz.	2.25
Sulfate, 1 oz vials	oz.	2.25
Witch Hazel Ext., 50 gal bbl	gal.	.60 .80
Zinc Carb, USP, 100 lb keg	lb.	.28 .31
Chloride, USP, 25 jars ex	lb.	.24 .29
Iodide, 5 lb bottles	lb.	4.25
Oxide, USP, 100 lb bbls	lb.	.13 .14
Stearate, USP, 50 lb bbl	lb.	.16 .17
Sulfate, USP, 100 lb bbl	lb.	.08 .09
Sulfocarbolate, 100 lb kegs	lb.	.23 .26

Miscellaneous

Absorption Bases	lb.	.60 .75
Castor Oil, odorless, bbls	lb.	.12
Chalk drop, 175 lb. bbls	lb.	.03½
Precip. light, 250 lb. cask	lb.	.04½
Heavy 540 lb casks	lb.	.04½
English light, bags	lb.	.04½
English light, casks	lb	.05½
Cocoa Butter, fingers 12 lb. box	lb.	.22 .24
Cod Liver Oil Nor. 30 gal. bbls		27.00 30.00
Newfoundland	bbl.	21.00 22.00
Collodion U. S. P. 30 lb. dr	lb.	.13 .14
Colors certified; 1 lb. cans, 5 lb. cans		
Amaranth No. 107	lb.	2.55 2.65
Brilliant Blue F.C.F.	lb.	13.00 13.50
Erythrosine No. 517	lb.	17.00 17.50
Orange Ind. 85	lb.	2.55 2.65
Ponceau 3R No. 56	lb.	5.25 5.50
Tartrazine No. 94	lb.	2.55 2.65
Corn Syrup 42° 50 gal. bbl.	100 lb.	2.28
Gelatin, USP, Silver 100 lb. cases	lb.	.49 .55
Pure Food, 50 lb. bbl	lb.	.47 .49
Glucose, (grape sugar) dry 70° bags c-1 NY	100 lb.	3.14 3.24
Haarlem Oil, bot 6 gross cases	gross	3.25
Imported, 5 gr. cs	gross	3.35
Kaolin, Bags	lb.	.05 .08
Colloidal Grade 200 lb. tin lined wooden drums	lb.	.10½ .12
Mineral Oil White, 50 gal. bbls. 80-90 vis	gal.	.53 .58
125-130 vis	gal.	.74½ .84½
320-330 vis	gal.	.84½ .94½
Russian 80-85 vis	gal.	.70 .75
110-115 vis	gal.	.79 .84
145-155 vis	gal.	.83 .88
180-185 vis	gal.	.86 .91
335-345 vis	gal.	.93 .98
Olive Oil, Edible bbls	gal.	1.45 1.65
Paraffin Wax, fully refined, slabs 125 @ 127 A.M.P. bags	lb.	.055
130 @ 132 A.M.P. bags	lb.	.0595
135 @ 137 A.M.P bags	lb.	.0655
Petrolatum, Lily White, USP, 400 lb. bbl	lb.	.07½ .08½
Snow White USP, 400 lb. bbls	lb.	.08½ .09½
Rice Starch, 140 lb bags	lb.	.09 .10
Soap Castile, bars 40 lb. Case	Cs.	12.75
Powd, USP 250 lb. bbls	lb.	.21 .23
Green, USP, 450 lb. bbls	lb.	.07½ .07½
Neutral, powd. 200 lb. bbls	lb.	.18½ .20½
Talc, Italian, 220 lb bags	ton.	60.00 75.00
French, 220 lb bags	ton.	45.00 50.00
Turtle Oil, gal		3.50 5.00

Waxes, See Drugs & Spices

Aromatics and Essential Oils

Acetophenene, CP, 1 lb bot	lb.	3.50	3.65
Aldehyde, C 8 (Otcyl) 1 lb bot	lb.	30.00	35.00
C 7, 1 lb bot	lb.	4.50	5.50
C 9 (Nonyl), 1 lb bot	lb.	40.00	45.00
C 10 (Decyl), 1 lb bot	lb.	30.00	35.00
C 14, 1 lb bot	lb.	8.50	14.00
C 16, 1 lb bot	lb.	9.25	18.00
AMYL ACETATE, pure, 25 lb cans	lb.	.43	.50
Butyrate, 1 lb bot	lb.	.95	1.50
Butyrate, 5 lb bot	lb.	...	1.00
Cinnamate, 5 lb bot	lb.	9.50	9.75
Formate, 1 lb bot	lb.	...	1.75
Formate, 5 lb bot	lb.	...	1.60
Phenyl Acetate, 1 lb bot	lb.	4.50	5.00
Salicylate, 100 lb cbys	lb.	.65	1.25
Anethol, 2 lb bot	lb.	1.00	1.10
Anisic Aldehyde, 1 lb bot	lb.	3.10	3.60
Benzaldehyde, USP, 40 lb cbys	lb.	1.30	1.40
FFC, 40 lb cbys	lb.	1.35	1.45
Benzoic Ether, see Ethyl Benzoate			
Benzophenone, 1 lb bot	lb.	1.75	2.25
Benzyl Acetate, 100 lb cbys	lb.	.60	.80
Alcohol, 5 lb bot	lb.	.85	.95
BENZYL BENZOATE		1.10	1.15
Medicinal, FFC	lb.	...	1.40
Buytrate, CP, 1 lb bot	lb.	9.25	9.50
Benzyl Cinnamate, 1 lb bot	lb.	7.00	7.25
Formate, 1 lb bot	lb.	3.15	3.25
Propionate, 1 lb bot	lb.	2.25	2.40
Succinate, 1 lb bot	lb.	5.25	5.50
Valerate, 5 lb bot	lb.	3.00	3.25
Borneol, 1 lb bot	lb.	1.35	1.85
Bornyl Acetate, 1 lb bot	lb.	1.50	2.60
Bromstyrol, 25 lb cases	lb.	3.75	3.85
Butyl Anthranilate dom, 1 lb bot	lb.		
Carvol, 5 lb bot	lb.	3.10	3.50
Cinnamic Acid, 5 lb cans	lb.	3.25	3.50
Alcohol liquid, 1 lb bot	lb.	2.50	2.60
Crystallizable	lb.	3.50	4.00
Aldehyde	lb.	2.25	2.50
Imported, 1 lb bot	lb.	7.75	9.00
Citral, 25 lb cans	lb.	2.00	3.20
Citronellol 1 lb bot	lb.	2.10	2.35
Citronelyl Acetate, 1 lb bot	lb.	3.50	3.75
Coumarin, 25 lb cans	lb.	3.25	3.50
DECYL ALCOHOL	lb.	22.00	25.00
Diphenyloxide, 25 lb tins	lb.	1.05	1.25
Diphenyl Methane	lb.	1.75	2.00
Duodecyl Alcohol	lb.	24.00	26.00
Ethyl Acetate, pure, 5 lb bot	lb.	.05½	.06½
Benzoate, 5 lb bot	lb.	1.25	1.50
Ethyl Butyrate, 5 lb bot	lb.	1.80	2.00
Caproate, 1 lb bot	lb.	3.25	3.50
Cinnamate, 1 lb bot	lb.	4.00	4.50
Formate, 5 lb bot	lb.	1.00	1.25
Methyl Paracresol, 1 lb bot	lb.	3.25	3.50
Phenyl Acetate, 5 lb bot	lb.	3.75	4.00
Valerate, 5 lb bot	lb.	...	3.75
Salicylate, 5 lb bot	lb.	1.95	2.00
Eucalyptol, USP, 50 lb cans	lb.	.57	.60
Eugenol, USP, 25 lb cans	lb.	2.00	2.50
Geraniol, 50 lb cases	lb.	1.75	2.35
Geranyl Acetate, 1 lb bot	lb.	2.75	2.80
Butyrate, 1 lb bot	lb.	13.00	13.50
Formate, 1 lb bot	lb.	12.00	12.50
Heliotropin, 100-10 lbs	lb.	1.75	2.00
Imported	lb.	2.10	2.30
Hydroxycitronellal, 1 lb	lb.	2.75	3.85
Indol, CP, 1 oz bot	oz.	2.90	3.00
IONONE, 1 lb bot 100%	lb.	4.00	4.50
Alpha	lb.	5.75	6.00
Beta	lb.	4.50	5.00
Methyl	lb.	5.00	5.25
Iso Borneol	lb.	2.25	2.35
Iso Bornyl Acetate	lb.	3.00	3.20
Iso-Butyl Benzoate, 5 lb bot	lb.	2.75	3.00
Iso-Eugenol, 1 lb bot	lb.	3.00	3.05
Iso-Safrol, 1 lb bot imp	lb.	1.75	1.85
Domestic, 5 lb bot	lb.	3.50	3.75
Linalol from Bois de Rose, 5 lb bot	lb.	1.80	3.50
Linalyl Acetate, 1 lb bot	lb.	2.25	2.35
Benzoate, 1 lb bot	lb.	13.00	14.00
Formate, 5 lb bot	lb.	10.50	12.00
METHYL ACETOPHENONE	lb.	2.00	2.15
Anthranilate, 1 lb bot	lb.	2.15	2.25
Imported	lb.	2.70	2.75
Benzoate, 5 lb bot imp	lb.	1.25	1.35
Domestic, 5 lb bot	lb.	1.25	1.35
Cinnamate, 1 lb bot	lb.	3.35	4.00
Heptenone, 1 lb bot	lb	3.50	4.00
Paracresol, 1 lb bot	lb	4.50	8.00
Phenylacetate, 5 lb bot	lb	2.50	2.75
Salicylate, USP, 500 lb dr	lb.	...	.40
50 lb cases	lb.	...	.42
Mirbane rect. 1,000 lb drs	lb.	.12	.13
Musk Ambrette 1 lb cans	lb	6.00	6.25
Musk Ketone 1 lb cans	lb.	7.55	7.80
Xylene 5 lb cans	lb.	2.25	2.85
Nerolin 1 lb cans	lb.	1.35	1.40
Octyl Alcohol 1 lb bot	lb.	18.00	20.00
Oenanthic Ether lb bot	lb.	1.90	2.00
Oleoresin Aspidum			
USP, bot and tins	lb.	...	1.25
Capsicum, USP, bot and tins	lb.	2.15	2.30
Cubeb, USP, bot and tins	lb.	2.30	2.60
Ginger bot and tins	lb.	2.25	2.80
Malefern see Aspidum			
Orris, bot & tins	lb.	12.00	15.00
Pepper, black, USP, bot & tin	lb.	...	9.50
Vanilla, bot & tins	lb.	3.80	4.00
Paracresol Methyl Ether	lb.	4.25	4.50
Paracresyl Acetate	lb.	5.50	5.75
Para Cymene Refd 110 gal dr	gal.	2.25	2.50
PHENYLACETALDEHYDE	lb.	4.50	4.75
50% 1 lb bot	lb.	4.50	4.75
Imported 50%	lb.	8.00	8.25
100%	lb.	2.65	2.90
Phenylacetic Acid 1 lb bot	lb.	3.00	3.25
Phenyl Diacetate 1 oz bot	oz.	8.00	10.00
1 lb bot	lb.	7.00	7.75
Imported	lb.	3.75	4.00
Phenylethyl Alcohol 1 lb bot	lb.	8.25	8.75
Phenyl Ethyl Acetate	lb.	15.00	16.00
Butyrate 1 lb bot	lb.	19.00	21.00
Formate, 1 lb bot	lb.	10.00	12.00
Propionate, 1 lb bot	lb.	14.00	15.00
Valerate, 1 lb bot	lb.	8.50	9.00
Phenylpropylalcohol, 1 lb bot	lb.	7.00	15.00
Rhodinol, 1 lb bot	lb.	4.50	7.00
Skatol, 1 oz bot	lb.	.85	.90
Terpinyl Acetate, 25 lb cans	lb.	.85	.90
Imported, 25 lb cans			
TERPINEOL, CP, 1000 lb drs	lb.	.33	.34
50 lb cans	lb.	.36	.37
Absolute, 25 lb cans	lb.	.48	.50
TOLYL ALDEHYDE, F.F.C. 40 lb. carboys	lb	2.10	2.25
Valerianic Ether see Ethyl Valerate			
Vanillin (Clove Oil), USP	lb.	4.50	4.75
(Guaiacol) USP	lb.	4.25	4.50

Essential Oils

Almond Bitter, USP, 5 lb bot	lb.	2.00	2.10
Bitter, ffPA, 5 lb bot	lb.	2.10	2.20
Sweet, 56 lb cans	lb.	.75	.78
Almond Meal, 25 lb cans	lb.	.18	.19
Amber crude, 25 lb tins	lb.	.18	.20
Rectified, 25 lb tins	lb.	.55	.60
Amber liquid, 400 lb drs	lb.	2.20	2.30
Ambergris, Black, boxes	oz.	14.00	15.00
Gray boxes	oz.	25.00	30.00
Angelica Root, 1 lb bot	lb.	29.00	32.00
Anise Tech, 400 lb drums	lb.	.42	.45
USP, 60 lb cans	lb.	.46	.49
Apricot Kernel, 50 lb cans	lb.	.22	.23
Bay, 25 lb tins N. F. V., 50.55% Phenol	lb.	1.65	1.80
Terpeneless	lb.	4.25	4.45
BERGAMOT, 25 lb coppers	lb.	1.85	2.00
Terpeneless	lb.	6.25	8.00
Artificial, 25 lb cans	lb.	1.00	1.40
Birch, Sweet, Northern, 25 lb tins	lb.	3.00	3.10
Southern, 25 lb tins	lb.	...	1.85
Birch Tar, rect., 5 lb bot	lb.	.60	.65
Crude, 50 lb tins	lb.	.13	.14
Bois de Rose, tins			
Brazilian	lb.	1.20	1.30
Cayenne, tins	lb.	2.50	3.00
Cade, 25 lb cans	lb.	.32	.38
Cajuput, native, 50 lb tins	lb.	.49	.57
Calamus, 5 lb bot	lb.	3.00	3.25
Camphor Sassa, 1000 lb drs	lb.	.13	.15
White, 400 lb drs	lb.	.16	.18
Cans, 50 lbs	lb.	.18	.20
CANANGA, Native 25 lb tins	lb.	2.10	2.20
Rectified, 25 lb tins	lb.	2.50	2.60
Caraway, USP	lb.	1.95	2.00
Cardamon, NF, 1 lb bot	lb.	14.00	15.00
Cascarilla, 1 lb bot	lb.	56.00	70.00
Cassia,			
Redist, USP, 50 lb cans	lb.	1.15	1.20
Cedar Leaf, 50 lb tins	lb.	.75	.80
Cedar Wood, light, 1000 lb drs	lb.	.31	.35
Celery, 1 lb bot	lb.	10.50	12.50
Chaulmoogra, USP 80 lb cases	lb.	...	1.50
Cinnamom Ceylon, 1 lb bot	lb.	8.00	10.00
Leaf, 5 lb bot	lb.	1.85	1.95
CITRONELLA Ceylon, 1000 lb drs	lb.	.38	.39
50 lb tins	lb.	.40	.41
Java, 400 lb drs	lb.	.52	.54
50 lb tins	lb.	.54	.56
Civet, Abyssin, horns	oz.	2.10	3.00
Cloves, USP, 50 lb cans	lb.	.95	1.00
6 lb bot	lb.	1.05	1.15
Copaiba	lb.	.55	.60
Coriander, USP, 10 lb bots	lb.	4.35	4.50
Croton USP, 25 lb tins	lb.	2.25	2.50
Cubebs, USP, 5 lb bot	lb.	2.25	2.85
Cumin, 1 lb bot	lb.	7.50	8.00
Dill, 25 lb cans	lb.	3.25	5.25
Erigeron, 20 lb tins	lb.	1.15	1.40
EUCALYPTUS Austl, USP, 56 lb cans, cases	lb.	.27	.29
500 lb drs	lb.	.26	.28
Fennel, USP, 25 lb tins	lb.	1.15	1.40
Geranium African, 25 lb tins	lb.	5.25	5.75
Bourbon, 28 lb tins	lb.	5.15	5.50
Turkish, 28 lb tins	lb.	2.15	2.50
Ginger, 1 lb bot	lb.	3.40	3.75
Gingergrass, 28 lb tins	lb.	2.50	2.70
Grape Fruit	lb.	3.00	3.25
Hemlock, 25 lb tins	lb.	.75	.90
Juniper Berries, USP, 25 lb tins	lb.	1.50	3.00
Wood, 50 lb tins	lb.	.50	.60
Labdanum, 5 lb bot	lb.	5.50	6.00
LAVENDER, USP, 28 lb tins	lb	2.25	4.25
Spike Spanish, 50 lb cans	lb.	.68	1.00
Lemon Ital, 25 lb cans	lb.	1.15	1.30
California 35 lb cbys	lb.	...	.75
Lemongrass, native, 50 lb cans	lb.	1.05	1.40
Limes, expressed, 25 lb tins	lb.	10.00	12.50
Distilled, 25 lb tins	lb.	7.25	7.75
Linaloe Mex., 70 lb cases	lb.	...	1.40
Mace, distilled, 50 lb tins	lb	1.10	1.15
Mandarin, 25 lb cases	lb.	3.75	4.00
Musk Tonquin, tins, Pods	oz.	18.00	20.00
Tonquin, tins, Grained	oz.	18.00	22.00
MUSTARD, USP, 1 lb bots	lb.	8.50	9.00
Artif, USP, 5 lb bot	lb.	1.75	1.85
Neroli Bigarade, ¼ & ½ & 1 lb bot	lb.	70.00	100.00
Petale, 1 lb bot	lb.	90.00	100.00
Artificial, 1 lb bot	lb.	5.00	15.00
Nutmeg, USP, 50 lb tins	lb.	1.10	1.15
ORANGE BITTER, 25 lb tins	lb	1.20	1.50
Sweet African 25 lb. tins	lb.	1.15	1.20
Sweet W Ind, 25 lb tins	lb.	1.30	1.50
Italian, 25 lb cop	lb	1.40	1.70
Orange American, Cold pressed 25 lb tins	lb.	...	1.10
Distilled, 25 lb tins	lb.	...	.55
Spanish, 25 lb tins	lb.	...	1.60
Oil Orris, concrete	oz.	4.00	4.25
Origanum, 50 lb cans tech	lb.	.25	.27
Parsley, 1 lb bot	lb.	7.25	7.50
Patchouli, 5 lb bot	lb.	3.50	4.25
Pennyroyal, dom, 25 lb tins	lb.	1.95	2.00
Imported, 25 lb tins	lb.	1.45	1.60
Pepper Black lb.		...	6.00
Peppermint, nat. 60 lb cases	lb.	2.30	2.70
Redis, USP, 60 lb cs	lb.	2.60	3.00
Petit Grain S A., 25 lb tins	lb.	1.10	1.15
French, 1 lb bot	lb.	4.50	4.75
Italian, 25 lb tins	lb.	2.20	2.30
Pimento Leaf, 25 lb tins	lb.	1.15	1.30
Berries, 25 lb tins	lb.	3.00	3.10
Pine Needle Siberian, cans	lb.	.75	.95
Pinus, Sylvestris, 25 lb tins	lb.	1.40	2.00
Pumilio, USP, 25 lb tins	lb.	1.85	1.90
Rose Fr, 8, 16, & 32 oz pkgs	lb.	14.00	17.00
Bulg, 8, 10 & 32 oz pkgs	oz.	7.50	15.00
Rosemary, USP, 27½ lb tins	lb.	.36	.42
1000 lb drums	lb.	.34	.36
Tech, 25½ lb tins	lb.	.30	.32
Rue, 1 lb bot	lb.	2.25	2.50
SANDALWOOD, E Ind, USP, 100 lb case	lb.	5.75	6.00
W Indian (Amyris), 25 lb. tins	lb.	2.85	2.95
Australian, Tins		5.25	5.65
Sassafras, USP, 50 lb cans	lb.	.90	1.05
Artificial, 1000 lb drs, 60 lb cans	lb.	.22½	.24
Safrol, cans	lb.	.27	.29
Sage, Dalmatian, 25 lb. cans	lb.	2.00	2.10
Savin, 50 lb tins	lb.	1.85	2.00
Snakeroot, Canada	lb.	8.25	8.50
SPEARMINT, USP, 50 lb tins	lb.	1.10	1.30
Spruce, 50 lb tins	lb	.75	.80
Tansy, American, 25 lb tins	lb.	2.00	2.05
Tar, 50 gal bbls	lb.	.25	.30
USP, 50 gal bbls	lb.	.75	1.50
Thyme, red, NF, 25 lb tins	lb.	.65	.80
White, NF, 25 lb tins	lb.	.80	1.05
Tech, 110 lb drums	lb.	.50	.55
Turpentine, USP, rect cbys	lb.	.27	.30
Vetivert Bourbon, 10 bot	lb.	5.75	6.00
Indian, 1 lb bot	lb.	22.00	25.00
Java, 1 lb bot	lb.	12.00	13.00
Wine, heavy, 1 lb bot	lb.	1.50	1.60
WINTERGREEN Gaultheria, true, 25 lb tin	lb.	8.00	10.00
Southern, 25 lb tins	lb.	3.75	4.00
Synthetic see Methyl salicylate			
Wormseed, Balt, 25 lb tins	lb.	2.25	2.45
Wormwood, dom, 25 lb tins	lb.	3.25	3.50
Ylang Ylang Bourbon, 10 lb tins No. 1	lb.	4.75	5.50
10 lb tins No. 2	lb.	3.50	3.75
Manila, 1 lb bot	lb.	22.00	30.00

Drugs and Spices

Aconite Root, USP, bags	lb.	.13	.14
Agar Agar, No 1, bales	lb.	.49	.52
Agar Agar No 2 bales	lb.	.44	.48
Aletris Root, bags	lb.	.17	.19
Alkanet Root, bags	lb	.11	.13
ALOES, Cape, 400 lb cases	lb.	.10	.11
Curacao, 140 lb cases	lb.	.10	.11
Socotrine, Whole, 300 lb cs	lb.	.30	.32
Althea Root, bags	lb.	.14	.16
Cut cases	lb.	.22	.23
Angelica Root, bags	lb.	.24	.55
Angostura Bark, bags	lb	.19	.20
Anise seed Star, bags	lb	.11	.11½
Spanish, bags	lb	.10¼	.10½
ARABIC GUM, White, No. 1, 220 lb bags	lb.	.16	.17
Seconds, 220 lb bags	lb.	.14	.15
Sorts, Amber, 220 lb bags	lb.	.08	.08½
Powd, USP, 300 lb bbls	lb.	.12	.15
Areca Nuts, 100 lb bbls	lb.	.10	07
Powd, 100 lb bbls	lb.	.06	.08
Arnica Flowers, bales	lb.	.11	.12
Root, bags	lb.	.14	.15
Arrowroot, St. Vincent, powd bbls	lb.	.09	.09½
Asafoetida, 250 lb cases	lb.	.18	.20
Powd, 50 lb boxes	lb.	.33	.35
Balm Gilead Buds, bags	lb.	.20	.21
Balmony Herbs, bales	lb.	.10	.12
BALSAM COPAIBA Para, 80 lb cases	lb.	.27	.29
South American, USP, 80 lb cases	lb.	.29	.31
Peru, 120 lb cases	lb.	1.00	1.05
Tolu, 90 lb cases	lb.	.78	.88
Barberry Bark, of root, bags	lb.	.16	.18
Bayberry Bark, bales	lb.	.07	.08
Wax bbls	lb.	.15	.17
Bees Wax, White, cases	lb.	.32	.36
Yellow refined cases	lb.	.25	.28
Yellow Crude Bags	lb	.20	.24
BELLADONNA LEAVES, bale	lb.	.15	.18
Root, bags	lb.	.13	.15
Benzoin Gum, Siam, boxes	lb.	1.05	1.50
Sumatra, cases	lb	.22	.24
Berberis Aquafolium Root, bags	lb.	.09	.10
Beth Root, bags	lb.	.08	.09
Black Indian Hemp Root, 100 lb bags	lb.	.11	.12
Blood Root, bags	lb.	.12	.13
Blueflag Root, bags	lb.	.12	.13
Boldo Leaves, bales	lb.	.11	.13
Boneset Herb, bales	lb.	08	09
Borage Flowers, bales	lb.	.19	.20
Broomtop Herb Cut, bales	lb.	.08	.09
Bryonia Root, bags	lb.	.10	.11
BUCHU LEAVES Short, 250 lb. bales	lb.	.19	.21
Long bales	lb.	.75	.80
Buckbean Leaves, bales	lb.	.09	.10
Buckthorn Bark, bags	lb.	.06	.07
Berries, bags	lb.	.29	.34
Burdock Root, bags	lb.	.11	.12
Seed bags	lb.	.30	...
Burgundy Pitch, 110 stand gross for net	lb.	.08	.09
Imported	lb.	.10	.11
Calabar Beans, bags	lb.	.15	.16
Calamus Root, blchd cases	lb.	.23	.25
Unbleached, bags	lb.	.07	.08
Calendula Petals, imp bales	lb.	.58	.60
Calisaya Bark, bales	lb.	.17	.18
Powdered, bbls	lb.	.22	.23
Canary Seed, South America, bags	lb.	.03¼	.04
Morocco	lb.	.04½	.04½
Turkish	lb.	.03¾	.04½
Candelilla Wax, bags	lb.	.10	.10¾
Canella Alba Bark, bales	lb.	25	26
Cannabis, U.S.P.	lb	1[illegible]	23
Cantharides, Chinese, cases	lb.	1.10	1.15
Powdered, boxes	lb.	1.25	1.30
Russian, cases	lb.	2.80	3.00
Powdered, boxes	lb.	3.05	3.25
Caraway Seed, Dutch, bags	lb.	.10	.10½
Cardamon bleached, cases	lb.	.80	1.10
Decorticated, cases	lb.	.73	.75
Carnauba Wax No 1, 100 lb bags	lb	.28	.29
Cascara Amarga, 150 lb bbls	lb.	1.25	1.30
So called bales	lb.	.25	.30
CASCARA SAGRADA,			
1931 bark	lb.	.11	.12
1932 bark	lb.	.10	.11
New crop	lb.	.09	.10
Cascarilla Bark, quills, bales	lb.	.70	.75
Siftings, bbls	lb.	.50	...
Cassia Batavia No. 1 bales	lb.	.10¼	.10¾
Shortstick, bales	lb.	.09½	.10
Batavia No. 3, bales	lb.	.08	.08½
China Select Rolls, cases	lb.	.05¾	.06½
Broken, bales	lb.	.04	.04½
Saigon, thin	lb.	.18	.18½
Buds, cases	lb.	12	.12½
Fistula, baskets	lb.	.08½	.10
Catnip, Herb, bales	lb.	.14	.15
Celery Seed, bales	lb.	.54	.55
Ceresin Wax, White, bags	lb.	.08	.12
Yellow 200 lb. bags	lb.	.07	.11
Imp white 100 lb. bags	lb	.25	.40
CHAMOMILE FLOWERS			
Roman, bales	lb.	.68	.70
Hungarian, cases	lb.	.16	.17
Charcoal Willow, powd, bbls	lb.	06	.06½
Wood, powd, bbls	lb.	.04	.05
Chestnut Bark	lb.	.07	.08
Leaves bales	lb.	.05	.06
Chicle Gum, 200 lb. bales	lb.	.27	.30
Chiretta, bales	lb.	.13	.14
Cinnamon, Ceylon, No. 1, bales	lb.	.11½	.12
No. 2 bales	lb.	.09½	.10
Clover Tops, Red, bags	lb.	.18	.19
Cloves Zanzibar, bales	lb.	.11	.11½
Cochineal, Black	lb.	.51	...
Silver	lb.	.45	...
Cohosh Root, Black, bags	lb.	.06	.07
Blue, bags	lb.	.07	.08
Colchicum Root, bags	lb.	.11	.13
Seed, bags	lb.	.60	.65
COLOMBO ROOT, bags	lb.	.05	.07
Colocynth Pulp, bales	lb.	.13	.14
Coltsfoot Leaves, bags	lb.	.07	.08
Comfrey Root, bags	lb.	.11	.12
Condurango Bark, bags	lb.	.09	.10
Coriander Seed, Morocco, bags	lb.	.06	.07
Bleached, bags	lb.	.08	.09
Corn Silk, bales	lb.	.06	.07
Cotton Root Bark, bales	lb.	.08	.09
Cowhage, 1 oz tins	oz.	1.00	...
Cramp Bark so called bales	lb.	.06	.08
True, bags	lb.	.25	.26
Cranesbill Root, bags	lb.	.09	.10
CUBEB BERRIES, XX bags	lb.	.30	.31
Powdered, boxes	lb	.32	.33
Culvers Root, bags	lb.	.14	.15
Cumin Seed, Morocco, bags	lb.	.16	.17
Cuttlefish, Bone Trieste, Straps	lb.	.19	.22
French, boxes	lb.	.18	.21
Powdered, bbls	lb.	.09	.10
Broken, bales	lb.	.07	...
Damiana Leaves, bales	lb.	.16	.17
Dandelion Root, Imp, bags	lb.	.15	.16
Deer Tongue Leaves, bales	lb.	.07	.09
Digitalis Leaves, bales	lb.	.30	.32
Dogwood Bark, Jamaica bags	lb.	.07	.08
American bales	lb.	.06½	...
Doggrass Root, USP, cut bags	lb.	.11	.12
Dragons Blood Mass, cases	lb.	.80	.85
Reeds, boxes	lb.	.85	.90
Echinacea Root, bags	lb.	.21	.22
Elcampane Root, bags	lb.	.06	.07
Elder Flowers, bags	lb.	.14	.15
Elemi Gum, 85 lb cases	lb.	11¾	.12½
Elm Bark, bundles	lb.	.17	.18
Grinding bags	lb.	.09	.10
Powdered, bbls	lb.	.15	.18
Ephedra Vulgaris, bales	lb.	.05	.06
ERGOT, 150-200 lb bags	lb.	.41	.47
Eucalyptus Leaves, bales	lb.	.06	.07
Euphorbia Pilulifera, Herb, bags	lb	.06	.08
Euphorbium Gum, cases	lb.	.17	.20
Fennel Seed, French, bags	lb.	.07½	.08
German bags	lb.	.16	.17
Foenugreek Seed, 200 lb bags	lb.	.04	.04½
Fish Berries, 100-125 lb bag	lb.	.14	.15
Flax Seed, Whole 182 lb bbls	lb.	.05½	.06½
Ground, 180 lb bbls	lb.	.06	.07½
Fringe Tree Bark or Root bags	lb.	.10	.12
Fumigating Pastiles, boxes	lb.	.28	.30
Galangal Root, bags	lb.	.08	.09
Galbanum Gum, cans	lb.	.85	.90
Gamboge Gum, 100 lb cases	lb.	.55	.60
Powdered, cases	lb.	.65	.70
Gelsemium Root, bags	lb.	.07	.08
GENTIAN ROOT, bags	lb.	.13	.14
Ground bbls, boxes	lb.	.15	.16
Powdered, bbls, boxes	lb.	.16	.17
Ginger, African, bags	lb.	.05¼	.05¾
Jamaica Grinding bags	lb.	.16	.19
Cochin ABC & Lemon, bags	lb.	.05¼	.06
Ginseng Root, cultivated cs	lb.	8.00	10.00
Wild Southern, cases	lb.	11.00	13.00
Golden Seal Root, bags	lb.	1.00	1.05
Powdered, boxes	lb.	1.10	1.20
Herb, barrels	lb.	.35	.40
Grains of Paradise, bags	lb.	.09	.10
Grindelia Robusta, Herb, bale	lb.	.07	.08
Guaiac Gum, 150 lb cases	lb.	.20	.22
Strained 75 lb cases	lb.	.70	.75
Guarana, tin cases	lb.	.50	.55
Hellebore Root, Black, bbls	lb.	.05½	.06
White, 250 lb bbls	lb.	.07	.08
Powdered	lb.	.10	.11
Helonias Root, bags	lb.	.25	.27
Hemp Seed, bags	lb.	.03	.03½
Henbane Leaves, USP, bales	lb.	.12	.13
HENNA LEAVES, bales	lb.	.07	.08
Powdered	lb.	.10	.15
Hops, bales	lb.	.50	.55
Horehound, Herb, bales	lb.	.07	.07½
Hydrangea Root, bales	lb.	.06	.07
IPECAC ROOT, Cartagena, bags	lb.	.75	.80
Powdered, 220 lb bbls	lb.	.85	.90
Nicaraugua 125 lb bags	lb.	.65	.70
Isinglass, American, 130 lb cases	lb.	.95	1.00
Russian (Beluga), boxes	lb.	4.50	...
Jaborandi Leaves, bales	lb.	.11	.12
Jalap Root, Whole, 150 lb bag	lb.	.16	.17
USP, Powd, 250 lb bbls	lb.	.20	.21
Japan Wax 224 lb. cases	lb.	.07	.07¾
JUNIPER BERRIES, 125 lb bags	lb.	.06½	.07
Kamala, boxes	lb.	.21	.22
Karaya Gum, Powdered, bbls	lb.	.09	.25
Kava Kava Root, bags	lb.	.13	.14
Kino Gum, Black, cases	lb.	.70	.75
Kola Nuts, 150 lb bags	lb.	.05½	.06
Lady Slipper Root, bags	lb.	.28	.30
Larkspur Seed, bags	lb.	.25	.27
Laurel Berries, bags	lb.	.08	.09
Leaves, Greek, bales	lb.	.04¼	.04¾
Lavender Flowers, Ordinary	lb.	.22	.26
Selected	lb.	.37	.39
Lemon Peel, bags	lb.	.08½	.09
LICORICE ROOT, Whole bbls	lb.	.12	.15
Spanish Natural bales	lb.	.05½	.07
Powdered, bbls	lb.	.09	.11
Selected Cases	lb.	.12	.15
Cutting, 125 lb bags	ln.	.06	.06½
Turkish, 150 lb bales	lb.	.05	.06
Linden Flowers with leaves, bales	lb.	.14	.15
Without leaves, bales	lb.	.17	.18
Liverwort Leaves, bales	lb.	.13	.14
Lobelia, Herb, bales	lb.	.28	.30
Seed, bags	lb.	.26	.28
Lovage Root, Imp., bags	lb.	.23	.25
Lupulin N. F., tins	lb.	1.75	2.00
Lycopodium, 88 lb. cases	lb.	.33	.35
MACE SIAUW, No. 1, cases	lb.	.38	.39
Banda No. 1, cases	lb.	.45	.46
Batavia No. 2, cases	lb.	.23	.24
Malva Flowers, Blue, bales	lb.	.55	.60
Black, bales	lb.	.18	.33
Leaves, bales	lb.	.12	.13
Manaca Root, bales	lb.	.19	.20
Manna, Large Flake, cases	lb.	.70	.75
Small Flake, cakes	lb.	.55	.60
Sorts, cases	lb.	.50	.55
Mandrake Root, bags	lb.	.11	.12
Marjoram, Herb			
French, No. 1 bales	lb.	.32	.33
German, bales	lb.	Nom.	
Mastic Gum, 120 lb. cases	lb.	.34½	.36
Matico Leaves, bales	lb.	.19	.21
Mezereon Bark, bags	lb.	.19	.20
Millet Seed, Yellow, bags	lb.	.04	.04½
Montan Wax, Crude, bags	lb.	.09	.10
Bleached, pure, bags	lb.	.30	.35
Moss, Iceland, bales	lb.	.09	.10
Irish, Bleached, bales	lb.	.11	.12
Mullein Flowers, tins	lb.	.95	1.00
Leaves, bales	lb.	.07	.07¼
Musk Root, Russian, bags	lb.	.06	.07
Myrrh Gum, 200 lb, cases	lb.	.21	.23
Nutgalls, Chinese, bags	lb.	.22	...
Aleppy, bags	lb.	...	.20
Powdered, bags	lb.	.13	.15
Nutmegs, 110's cases	lb.	.12	.12½
75's & 80's cases	lb.	.16¼	.17
Grinding, bags, W.I.	lb	.09	.09½
NUX-VOMICA Buttons, bag	lb.	.05	.06
Powdered, 200 lb bbls	lb.	.08½	.09½
Oak Bark, bags	lb.	.05½	.06
Olibanum Gum, 280 lb cases	lb.	.06	.07
Siftings	lb.	.19	.21
Tears, No. 1 Extra	lb.	.14	.15
No. 2	lb.	.09	.10
No. 3	lb.	10.00	11.00
Opium Gum, USP, cases	lb.	11.00	12.00
Granular, cans	lb.	11.00	12.00
Powdered, USP, cans	lb.	.25	.30
Orange Flowers, cases	lb.	.08	.09
Peel, Bitter, bags	lb.	.11	.12
Sweet bags	lb.	.10	.11
ORRIS ROOT, Flor. bid. bags	lb.	.13	.14
Powdered, 200 lb bbls	lb.	.07	.08
Verona, bags	lb.	.11	.12
Powdered, 200 lb bbls	lb.	1.10	1.15
Fingers, boxes	lb.	...	...
Ozokerite Wax, White	lb.	.28	.40
Bags	lb.	.33	.42
Green, Hard, bags	lb.	.22	.28
Yellow, Refined, bags	lb.	1.55	1.60
Papain, Crude, 150 lb cases	lb.	1.70	2.00
Pure, Powdered, 10 lb bot	lb.	.20	.24
Paprika, Spanish, bags	lb.	.22½	.23
Mild Hungarian, bags	lb.	.16	.18
Pareira Brava Root, bags	lb.	.05½	.06½
Passion Flower, bales	lb.	.15	.16
Patchouli Leaves, bales	lb.	.08	.09
Pennyroyal, Herb, 100 lb bags	lb.	.11	.12
Leaves, 100 lb bags	lb.		

Drugs and Spices

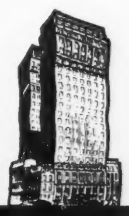
PEPPERMINT LEAVES, Imp bales	lb.	.30	.50
Domestic, bales	lb.	.18	.20
Pichi Leaves, bags	lb	.08	.09
Pimento Select, bags	lb.	.06	.06½
Pink Root, True, bags	lb.	.26	.28
Pleurisy Root, bags	lb.	.13	.14
Poke Berries, bags	lb.	.15	.16
Root, 200 lb bales	lb.	.05½	.06
Pomegranate Bark of Root, bags	lb.	.25	.28
Bark of Fruit, bags	lb.	.15	.20
Bark of Tree, bags	lb.	.15	.17
POPPY FLOWERS, Red, bags	lb.	.35	.40
Prickly Ash Bark	lb.	.12	.15
Southern bags	lb.	.11	.11½
Northern, bags	lb.	.12	.13
Berries, bags	lb.	.20	.21
Prince's Pine, bales	lb.	.15	.20
Psyllium Seed, Black, bags	lb.	.14½	.16
Plantago Seed, Blonde, Bags	lb.	.06	.07
Pulsatilla, Herb, bags	lb.	.11	.12
Pumpkin Seed, bags	lb.	.11	.12
Pyrethrum Flowers	lb.	.26	.28
Pwd., pure, 200 lb.bbls.	lb.	.29	.31
Quassia Chips, bags	lb.	.07	.08
Quebracho, bulk, 125 lb. bbl.	lb.	.19	.20
Quince Seed, Spanish bags	lb.	.60	.65
Persian, bags	lb	.85	1.25
Rape Seed, German, bags	lb.	.04¾	.05¼
Dutch, bags	lb.	.05	.05½
Raspberries, Dried, bbls.	lb.	.30	.35
Red Saunders, bags	lb.	.08	.09
Rhatany Root, bags	lb.	.11	.12
Rhubarb Root, HD, cases	lb.	.20	.21
Powdered, bbls.	lb	.25	.26
Rosemary Leaves, bales	lb.	.05½	.06
Flowers, cases, bales	lb.	.28	.32
Rose Petals, pale	lb.	.13	.14
Red	lb.	.45	.50
Rue, Herb, bales	lb.	.16	.18
Sabadilla Seed, bags	lb.	.27	.28
Powdered, bbls.	lb.	.31	.32
SAFFRON FLOWERS, American, bales	lb.	.17	.19
Valencia, 1 lb cans	*lb.*	*13.00*	*13.50*
Sage Dalmatian, bales	lb.	.04¾	.05¼
Sandarac Gum, 300 lb bbls.	lb.	.38	.40
Sarsaparilla Root, Honduras, bales	lb.	.55	.60
Mexican, bales	lb.	.13	.14
Sassafras Bark, Ordinary, bales		.08	.10
Select, bales	lb.	.13	.15
Savory Leaves, bale	lb.	.05½	.06½
Saw Palmetto Berries, bags	lb.	.06	.07
Scammony Resin, boxes	lb.	1.30	1.35
Root, bags	lb.	.06	.07
Senega Root, bags	lb.	.43	.46
SENNA ALEX., 150 lb cases	lb.	.20	.25
Half leaf 150 lb bales	lb.	.08	.10
Sifting, 400 lb bales	lb.	.08	.09
Tinnevelly, Bold, 350 lb bales	lb.	.09	.11
Medium Leaf	lb.	.07½	.08½
Small Leaf	lb.	.06	.08
Pods, 350 lb	lb.	.08	.09
Powdered, 200 lb	lb.	.08	.09
Serpentaria Root, bags	lb.	.39	.40
Simaruba Bark, bales	lb.	.23	.25
Skullcap Leaves, Eastern, bales	lb.	.25	.30
Western, bales	lb.	.14	.24
Skunk Cabbage, Natural, bales	lb.	.13	.15
Snake Root, Canada Natural, bags	lb.	.16	.18
Canada, Stripped, bags	lb.	.40	.45
Soap Bark	lb.	.08	.09
Cut, 125-175 lb bags	lb.	.07½	.08½
Crushed, 200 lb bbls.	lb.	.15	...
Powdered, bbls.	lb.	.10	.11
Spearmint Leaves, American, bales	lb.	.18	.23
Spermaceti, blocks, cakes, cases	lb.	.20	.21
Bulk	lb.	.19	.20
Spikenard Root, bags	lb.	.07	.08
Squaw Vine, bales	lb.	.11	.12
Squills, White, tested	lb.	.06	.08
Powdered, bulk	lb.	.13	.15
Stavesacre Seed, bags	lb.	.18	.19
Stillingia Root, bags	lb.	.06	.07
Stone Root, bags	lb.	.07	.08
St. Ignatius Beans, bags	lb.	...	.90
St. John's Bread, bags	lb.	...	.07
STRAMONIUM LEAVES, bales	lb.	.11	.12
Seed, bags	lb.	.07½	...
Strophanthus Seed, Kombe, bags	lb.	1.50	1.65
Styrax Liquid, Artificial	lb.	.26	.35
Genuine, USP	lb.	.38	.43
Sunflower Seed, bags Calif.	lb.	.05	.06
Tamarinds, bbls	lb.	.05½	.06½
Kegs	keg	3.75	3.85
Tansy, Herb, bales	lb.	.12	.13
Thus Gum, 450 lb bbls.	lb.	.05½	.06½
THYME, Spanish, bags	lb.	nominal	
French, bags	lb.	.10	.10½
Tonga Root	lb.	.20	.23
Bark	lb.	.27	.30
Tonka Beans, Angostura Cases		2.25	2.50
Para cases	lb.	.65	.75
Surinam cases	lb.	1.35	1.50
Tragacanth Gum, No 1, 100 lb. cases	lb.	1.00	1.10
No. 2	lb.	.90	1.00
No. 3	lb.	.70	.80
Powdered, 50 lb boxes	lb.	.60	1.00
Turkish cases	lb.	.50	.60
Turmeric Root Madras, bags	lb.	.06	.06½
Aleppy bags	lb.	.06	.06½
Powdered	lb.	.09	.11
China bags	lb.	.11	.12
Turpentine Venice True, 80 lb cases	lb.	.30	.38
Artificial, 80 lb cases	lb.	.15	.16
Uva Ursi Leaves, bales	lb.	.05½	.06½
Valerian Root, Belgium bags	lb	.15	.17
VANILLA BEANS, Mexican, whole, cases	lb.	3.00	4.00
Cuts, cases	lb.	2.40	2.60
Bourbon, cases	lb.	.80	1.25
Vetivert Root, 100 lb bags	lb.	.20	.25
Violet Flowers, bags	lb.	.85	.90
Wahoo Bark of Root, bags	lb.	.38	.40
Bark of Tree, bags	lb.	.13	.14
White Pine Bark, Roseed, bags	lb.	.05½	.06
White Poplar Bark, bags	lb.	.06	.07½
Wild Cherry Bark, Natural thin, Green	lb.	.06	.07
Rossed bales	lb.	.09	.10
Thick Rossed, bales	lb.	.04	.05
Wild Indigo Root, bags	lb.	.09	.10
Willow Bark, bags	lb.	.05	.06
White, bags	lb.	.15	...
Witch Hazel Bark, bags	lb.	.05½	.06½
Leaves, bales	lb.	.06	.07
Wormseed, American, bags.	lb.	.06	.07
Wormwood, Herb, Imp., bales	lb.	.09	.10
Yellow Dock Root, bags	lb.	.08	.09
Yerba Mate, bags	lb.	.15	.17
Santa, bags	lb.	.07	.08

The Ideal LOCATION in PHILADELPHIA

Everything worthwhile in Philadelphia is at your very doorstep when you stop at Hotel Adelphia. Every point of historic interest ..stores...theatres...are easily reached. Here at this fine hotel you can enjoy every comfort and every luxury at low cost.

400 ROOMS
from $3. single from $5. double

ADELPHIA HOTEL COMPANY
DAVID B. PROVAN *Managing Director*



HOTEL ADELPHIA
CHESTNUT AT 13TH STREET

TAKE A HOLIDAY in NEW YORK!
2 delightful DAYS
$5.50 PER PERSON
HOTEL - TAXI
MEALS
THEATRE
ENTERTAINMENT
Everything Included!

FIRST DAY — Taxi to the hotel — Choice, comfortable room and bath — Dinner—then to a Broadway Show, not a movie.

SECOND DAY—Two appetizing meals at the Hotel, dinner and entertainment at the Quaint Village Barn.

Select any two days
COME ANYTIME YOU CHOOSE

HOTEL BROZTELL
FIFTH AVENUE *and* 27th STREET

Professional Service

FOOD RESEARCH LABORATORIES, Inc.
Dr. Philip B. Hawk, President
BIOCHEMISTS
SPECIALISTS IN VITAMIN ASSAYS
FORMULATION AND STANDARDIZATION OF MEDICINAL OR COSMETIC PREPARATIONS
114 East 32nd Street, New York
Member Ass'n Consulting Chemists and Chemical Engineers

LA WALL & HARRISSON
Charles H. LaWall Jos. W E. Harrisson
Analytical and Consulting Chemists
Pharmaceutical and Chemical Research
Process and Formula Development
Food, Drug and Water Analyses
Legal Testimony
214 South 12th Street Philadelphia, Pa.

H. A. SEIL, Ph. D. E. B. PUTT, Ph. C., B. Sc.
SEIL, PUTT & RUSBY, Inc.
Analytical and Consulting Chemists
Formerly Experts for U.S. Dept. of Agriculture
Analyses Made Formulas Developed
Research Investigations Conducted
Specialists in the Analysis of
Beverages Essential Oils
Flavoring Extracts Toilet Preparations
Foods Spices Drugs
Proprietary Medicines Special Formulas
Pyrethrum Insecticides
Lab's: 16 East 34th St. New York, N. Y.
Telephone: AShland 4-4343

Patents

PATENT YOUR IDEAS REGISTER YOUR **TRADE-MARK** BY **Z. H. POLACHEK** 1234 BROADWAY 31ST. NEW YORK
REG. PATENT ATTORNEY PROF. ENGINEER
WHAT IS YOUR INVENTION?
Send me a simple sketch or a model for Confidential Advice—Do It Now!

Classified

Situations Wanted

Sales Representative, 17 years selling experience in drugs, pharmaceuticals, essential oils, in New York territory to wholesale and retail trades. Executive ability. Box 890, THE DRUG AND COSMETIC INDUSTRY.

Pharmacist, Registered N. Y. S., 3 years retail experience, wishes to make connection with wholesale house for opportunity offered in sales or on the inside. Box 896, THE DRUG AND COSMETIC INDUSTRY.

CHEMIST—Production man—complete charge in production of creams, powders and lotions and wide experience in developing new products. Box 894, THE DRUG AND COSMETIC INDUSTRY.

Position desired by plant man with managing ability; experienced in colloids, emulsions, creams. Box 898, THE DRUG AND COSMETIC INDUSTRY.

Position wanted by a First Class Drug Chemist, Ph.D. A specialist in the manufacture of all kinds of pharmaceutical and therapeutical products, household remedies, flavoring extracts, fruit syrups, food products, toilet articles, perfumes, and Cosmetic specialties. Fully capable of developing and improving new items, has merchandising and creative ability and is able to assume full control of actual manufacturing. Box 883, THE DRUG AND COSMETIC INDUSTRY.

Classified

Business Opportunities

MARVELL PHARMACAL CO., Inc. (Member of A.P.M.A.) 55 W. 16th St., New York. Pharmacal, Cosmetic, Face Powders, Private Formulas. Formulas and Processes Developed. Colloid Mill used in making Toilet Creams and Ointments. Correspondence solicited.

Manufacturer of meritorious line established and now selling to drug trade desires small amount of capital to expand his business. No manufacturing risk; small overhead; large profits. $3,000 sufficient. Investor can become partner in business and handle money if desired. Big market for product. Address Joseph Wolfson, 6 West 104th St., New York, N. Y.

For sale or disposal on royalty basis: Process for non-irritating antiseptic, low toxicity, capable of manufacture with little expense. Patent pending. Box 899, THE DRUG AND COSMETIC INDUSTRY.

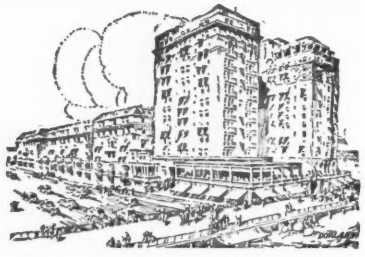
Nationally advertised line wanted for Ohio and West Virginia to sell along with present line. Best references. Please send full particulars. Box 897, THE DRUG AND COSMETIC INDUSTRY.

Wanted: Pharmaceutical items of merit, as distributor or on commission basis, for physicians, hospitals and drug stores in New England. Box 900, THE DRUG AND COSMETIC INDUSTRY.

SUPPOSITORIES vaginal, rectal. Hygiene jellies. Buyer's label. Free Catalog. Southport Chemical Co., 261 Greenwich St., New York.

Help Wanted

Wanted by a concern manufacturing brushless and lather shaving cream, a capable, experienced SALES MANAGER, to take entire charge of the business. State age and former connections. Box 895, THE DRUG AND COSMETIC INDUSTRY.



The ST. CHARLES
Occupying An Entire Block on the Boardwalk
ATLANTIC CITY
A Smart Hotel in America's Smartest Resort

A most beautifully appointed resort hotel . . . Excellent Cuisine . . . Spacious, sunny, cheerful rooms . . . The home-like atmosphere of the St. Charles make the days spent there a delightful memory . . . .

Golf . . . Horseback Riding
Sailing . . . Dancing
Spacious Solarium

IDEAL CONVENTION FACILITIES
RATES GREATLY REDUCED

NEW
Twenty-First Edition

The Indispensable
UNITED STATES DISPENSATORY

The Only Book In The World Which Contains:

I. ALL THE DRUGS and preparations of the U. S. P. X. considered in detail. II. The official descriptions and tests of the U. S. P. X. in full. III. The official formulas for galenicals of the U. S. P. X. IV. A summary of the important chemical incompatibilities of the official drugs. V. Every crude drug recognized by the National Formulary V described in full, including the tests for purity and identity. (The galenical preparations of the National Formulary V given in abstract). VI. ALL THE DRUGS and preparations of the British Pharmacopoeia 1914 described in full. VII. Descriptive articles on practically all important substances not included in the three legal standards, including the latest information on the new synthetic remedies. VIII. Concise, complete, authoritative articles on the Vaccines, Antitoxins, Serums, and similar products. IX. Gives in full the Food and Drugs Act of June 30th, 1907, and the Harrison Anti-narcotic Act. X. A list of synonyms. XI. Formulas for reagents used in the examination of urine, blood, sputum and stomach contents, etc. XII. Many official Tables of Weights, Measures, Specific Gravities, etc. XIII. Numerous references for scientific research.

About 2,000 pages Quarto

Bound in Durable Buckram $15.00

THE DRUG and COSMETIC INDUSTRY
101 West 31st St. ***Book Dept.*** **New York City**

Index to Advertisers

Abbott Laboratories, North Chicago, Ill. 407
Aluminum Seal Co., New Kensington, Pa. 345
American Lanolin Corp., Lawrence, Mass 407
Anchor Cap & Closure Corp., Long Island City, N. Y. 355
Arco Crown Cork & Cap Co., New York 361
Armstrong Cork & Insulation Co., Closure Division, Lancaster, Pa. 324
Ayers & Son, John W., Bloomfield, N. J. 405
Baker Chemical Co., J. T., Phillipsburg, N. J. 321
Benkert & Co., Inc., W., New York 403
Benzol Products Co., Newark, N. J. 407
Bopf-Whittam Corp., Westfield, N. J. 387
Bush & Co., Inc., W. J., New York 389
California Fruit Growers Exchange, Ontario, Cal. 317, 395, 403
Carr-Lowrey Glass Co., Baltimore, Md. 348
Colton Co., Arthur, Detroit, Mich 367
Crosby Carton Co., Inc., Boston, Mass. 359
Crown Cork & Seal Co., Baltimore, Md. ..... Cover 3
Dodge & Olcott Co., New York 315
Dreyer Inc., P. R., New York 405
duPont de Nemours & Co., Inc, E. I., Wilmington, Del. 371
Ehrmann-Strauss Co., Inc., New York 407
Ertel Engineering Corp., New York 369
Exposition of Chemical Industries, New York Insert between 344 & 345
Franks Chemical Products Co., Brooklyn, N. Y. 401
French, Inc., Benj., New York 403
Fritzsche Brothers, Inc., New York 385
General Plastics, Inc., No. Tonawanda, N. Y. 346
Givaudan-Delawanna, Inc., New York 319
Goldschmidt Corp., Th., New York 373
Gordon, H. R. M., New York 363
Gutmann & Co., Ferdinand. Brooklyn, N. Y. 363
Hagerty Bros. & Co., New York 363
Hart Glass Mfg. Co., Dunkirk, Ind. 357
Hatch Co., C. F., Lowell, Mass. 361
Heyden Chemical Corp., New York 397
Hopkins & Co., J. L., New York 387
Horn, John, New York 369
Industrial Chemical Sales Co., Inc., New York ..... Cover 2
Innis, Speiden & Co., Inc., New York 375
Interstate Color Co., Inc., New York 405
Kiefer Machine Co., Karl, Cincinnati, Ohio 367
Kimberly-Clark Corp., Neenah, Wis. 347
Kimble Glass Co., Vineland, N. J. 320
Koster-Keunen, Sayville, N. Y. 318
Leonhard Wax Co., Inc., Theodor, Paterson, N. J. 337
Magnus, Mabee & Reynard, Inc., New York 375
Mallinckrodt Chemical Works, St. Louis 326
McKesson & Robbins, Inc., New York 393
Monsanto Chemical Works, St. Louis ..... Insert facing 320
National Collapsible Tube Co., Providence, R. I. 357
National Metal Edge Box Co., Philadelphia, Pa. 369
New Jersey Zinc Co., New York 389
N. Y. Quinine & Chemical Works, Brooklyn, N. Y. 408
Owens-Illinois Glass Co., Toledo, Ohio 322
Parento, Inc., Compagnie, Croton-on-Hudson, N. Y. 343
Parsons, M. W., New York 415
Pease Laboratories, Inc., New York 373
Peek & Velsor, Inc., New York 405
Penick & Co., S. B., New York 405
Pfaudler Co., Rochester, N. Y. 323
Pfizer & Co., Inc., Chas., New York ..... Cover 4
Phoenix Metal Cap Co., Chicago, Ill. 313
Powell & Co., Inc., John, New York 379
Resinox Corp., Terre Haute, Ind. 359
Revson Co., R. F., New York 389
Riegel Paper Corp., New York 361
Rodgers Co., Geo. G., New York 369
Schofield-Donald Co., New York 401
Schwabacher & Co., Inc., S., New York 399
Sherka Chemical Co., Inc., New York 399
Sonneborn Sons, Inc., L., New York 416
Stanco Distributors, Inc., New York 391
Sterling Mfg. Co., Belleville, N. J. 369
Stokes Machine Co., F. J., Philadelphia, Pa. 365
Stokes & Smith Co., Philadelphia, Pa. ..... Insert facing 345
Sturge, John & E., Birmingham, England 339
Thurston & Braidich, New York 407
Titanium Pigment Co., New York 381
Todd Co., A. M., Kalamazoo, Mich 405
Ungerer & Co., New York ..... Insert facing 321
U. S. Bottlers Machinery Co., Chicago. Insert between 344 & 345
U. S. Industrial Alcohol Co., New York. Insert between 376 & 377
van Ameringen-Haebler, Inc., New York 383
Webb Publishing Co., St. Paul, Minn. 325
Will & Baumer Candle Co., Inc., Syracuse, N. Y. 341, 389
Wilson Laboratories, Chicago, Ill. 403

PLYMOUTH
RAW MATERIALS

● The Standard of Excellence for more than 30 years

FOR TOILET POWDERS

Zinc Stearate, U. S. P.
Magnesium Stearate
Rice Starch (Java)
Zinc Oxide, U. S. P.
Magnesium Carbonate, U. S. P.
Kaolin
Italian Talc

FOR TOILET CREAMS

Turtle Oil
Crystal "E" Cream Oil

Beeswax, white, U. S. P.	Stearol
Lanolin (Anhydrous)	Spermaceti
Petrolatum (Solid)	Ozokerites
Paraffin Wax	Cirine Wax

Thoreps—The New Absorption Base

FOR SHAMPOOS

Soluble Olive Oil
and
Soluble Castor Oil

M. W. PARSONS
Imports
and
Plymouth Organic Laboratories, Inc.
55 ANN STREET NEW YORK, N. Y.

WHITE OILS and PETROLATUMS

For Pharmaceutical and Cosmetic Purposes

● WHITE MINERAL OILS

KAYDOL U.S.P. Heavy
ORZOL U.S.P. Heavy
PURITAN U.S.P. Heavy
ERVOL U.S.P. Light
BLANDOL U.S.P. Light
CARNATION
KLEAROL

● PETROLATUMS

"DAUGHERTY" BRAND (ALL USP GRADES)

AMBER
EXTRA LIGHT AMBER
CREAM WHITE
LILY WHITE
SNOW WHITE
ALBA WHITE

ALSO CERTAIN SPECIAL GRADES

FONOLINE
Soft consistency USP Petrolatums, YELLOW or WHITE

● SPECIALTIES

SONO-JELL—Base for liquefying cleansing creams, pomades, ointments, etc.

SULFONOL CONCENTRATE—Base for soapless oil shampoos.

DEO-BASE—Odorless base for insecticides.

L. SONNEBORN SONS, Inc.

Refiners of White Oils and Petrolatums

New York Office
88 Lexington Avenue

Refineries { Petrolia, Pa.
Franklin, Pa.

Chicago Office
820 Tower Court

STOCKS CARRIED IN PRINCIPAL CITIES